LEGISLATIVE LIBRARY OF BRITISH COLUMBIA
3 3298 00234 2443

1995 British Columbia Emissions Inventory

of

Common Air Contaminants and

Greenhouse Gases

British Columbia Ministry of Environment, Lands and Parks
Air Resources Branch
Victoria, B.C.

May 1999

ABSTRACT

An emission inventory is an accounting of all sources of air pollution within a defined geographic area. A comprehensive emission inventory is an essential air quality management tool. This report describes the results of the 1995 emission inventory update for the Province of British Columbia. The common contaminants carbon monoxide, nitrogen oxides, sulphur oxides, total reduced sulphur, volatile organic compounds and particulate matter (with PM_{10} and $PM_{2.5}$ breakdowns) are included in this inventory along with the greenhouse gases carbon dioxide, methane, and nitrous oxide. For the common contaminants summaries by Ministry Waste Management Region, source category, and individual source are listed in the body of this report. A breakdown of greenhouse gas emissions that is more detailed than previous estimates provided by Environment Canada is also provided in this report.

100-06134/

1995 British Columbia Emissions Inventory

of

Common Air Contaminants and Greenhouse Gases

Errata Sheet April 2000

An emission inventory is an accounting of all sources of air pollution within a defined geographic area. With an emission inventory, the Ministry is able to identify sources that account for emission releases and take appropriate action.

While every effort is made to ensure accuracy in the emission inventory, data errors do occur from time to time. Errors were recently found in the pulp mill data:

- Pulp mill estimates contained in the inventory are based on permittee supplied monitoring data where available, and adjustment of the permit fee estimates where monitoring data is not available. There was an error in the permittee monitoring data for MacMillan Bloedel Powel River (now Pacifica Paper) that has been corrected.
- The original (May 1999) permit fee adjustments were based entirely on multiplying by a ratio of the production (reported by the company) over capacity (used as basis for setting fees). Two errors were introduced from this approach:

    1. In a few cases the production numbers are for total pulp whereas the capacity figures for permit fees are for bleached pulp production. This resulted in overestimation for a few sources.
    2. In many cases the permit fees are based on a flow rate and concentration (as stated in the permit). When the adjustments were originally made, production over capacity ratios were applied. For these sources it is more appropriate to adjust based on the number of discharge days (supplied by each permittee). Therefore, the adjustments were recalculated using a ratio of the number of discharge days over the number of days used to calculate permit fees (in most cases 365).

Original and revised pulp mill estimates are contained in the following inventory file:

British Columbia 1995 Emission Inventory Original and Revised Pulp Mill Estimates

When the 1995 emission inventory update data are being used the revised Paper and Allied Paper estimate data should be applied. Since the report has been out for about a year and ARB will soon be working on the year 2000 update, revisions will not be made to the 1995 inventory report.

The errors in the May 1999 report were calculation errors only; they are not linked in any way to an actual release of air emissions.

The Ministry welcomes input from end users of the emission inventory. The Ministry will consider input received and make appropriate improvements and changes to the data in the next emission inventory update, scheduled for 2000.

BRITISH COLUMBIA 1995 EMISSION INVENTORY ORGINAL AND REVISED PULP MILL ESTIMATES

Reg.	Permit	Company	Location	Original (May 1999) Estimates (tonnes)							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
1	1863	MACMILLAN BLOEDEL LIMITED	PORT ALBERNI	1,400	233	619	117		1,424	604	174
1	1902	FLETCHER CHALLENGE CANADA LIMITED	CROFTON	5,806	1,091	527	60	326	1,117	1,055	947
1	2708	HARMAC PACIFIC INC.	HARMAC	6,299	471	1,257	43	309	1,971	1,830	1,525
1	3201	CANADIAN PACIFIC FOREST PRODUCTS LIMITED	GOLD RIVER	2,644	302	51	150	186	1,831	1,566	1,240
1	3341	FLETCHER CHALLENGE CANADA LIMITED	ELK FALLS	11,270	1,333	75	388	808	1,890	1,264	931
1	3760	WESTERN PULP LIMITED PARTNERSHIP	PORT ALICE	1,839	957	1,840		73	1,348	1,157	972
2	1647	WESTERN PULP INC.	WOODFIBRE	3,274	278	77	14	145	581	527	420
2	3095	HOWE SOUND PULP AND PAPER LIMITED	PORT MELLON	8,632	1,380	406	9	410	313	282	232
2	3149	MACMILLAN BLOEDEL LIMITED	POWELL RIVER	24,488	6,881	2,190	207	1,500	2,303	1,924	1,525
2	7558	MACMILLAN BLOEDEL LIMITED	POWELL RIVER			0					
3	1517	WEYERHAEUSER CANADA LTD.	KAMLOOPS PULP MILL	2,405	433	282	26		2,737	1,767	1,300
3	1775	CROWN PACKAGING LTD.	KELOWNA	10	40	0		2	1,439	810	610
4	1756	CRESTBROOK FOREST INDUSTRIES LTD.	SKOOKUMCHUCK	19	0	0		2	5	5	5
4	1768	CITIC B.C. INC.	CASTLEGAR	113	1	0		10	28	28	28
4	2149	CRESTBROOK FOREST INDUSTRIES LTD.	SKOOKUMCHUCK	4,815	852	122	50	314	602	337	238
4	3080	CITIC B.C. INC.	CASTLEGAR	1,847	511	752	20	90	254	201	161
5	1578	CARIBOO PULP AND PAPER COMPANY LIMITED	QUESNEL, NORTHSTAR ROAD	5,535	510	1,128	37	271	500	454	357
5	5804	QUESNEL RIVER PULP COMPANY	QUESNEL	21	295	17	0	1	438	176	88
6	3083	WEST FRASER MILLS LTD	KITIMAT	3,888	404	1,242	167	137	1,755	1,597	1,275
6	3547	SKEENA CELLULOSE INC.	PT. EDWARD			2,500	3		2,430	2,082	1,713
7	1644	FLETCHER CHALLENGE CANADA LIMITED	MACKENZIE-PULP MILL	2,800	380	34	39	135	514	311	242
7	2559	NORTHWOOD PULP AND TIMBER LIMITED	PRINCE GEORGE	7,882	454	1,120	40	360	1,599	1,492	1,206
7	2761	CANADIAN FOREST PRODUCTS LTD.	PRINCE GEORGE PULP & PAPER	3,818	334	15	60	165	580	553	444
7	2762	INTERCONTINENTAL PULP COMPANY LTD.	PRINCE GEORGE	2,665	231	356	14	169	284	258	214
7	3647	FINLAY FOREST INDUSTRIES INC.	MACKENZIE	31	421	0		1	29	12	6
7	7779	FIBRECO PULP INC.	TAYLOR	27	136	1		7	265	172	142
7	8998	LOUISIANA-PACIFIC CANADA LTD.	20 KM. E. OF CHETWYND, NORTH OF HWY 97 ON 1A	991	17	6	0	112	9	6	4
7	13538	NORTHWOOD PULP AND TIMBER LIMITED	FRASER FLATS, PRINCE GEORGE, B.C.						42	17	8
			Total =	102,521	17,945	14,617	1,444	5,531	26,286	20,486	16,008

Note: Emission Totals Match - 1995 British Columbia Emissions Inventory of Common Air Contaminants and Greenhouse Gases, May 1999, Appendix A
BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS - EXCLUDING LOWER FRASER VALLEY - Paper and Allied Products

BRITISH COLUMBIA 1995 EMISSION INVENTORY ORGINAL AND REVISED PULP MILL ESTIMATES

Reg.	Permit	Company	Location	Revised (April 2000) Estimates (tonnes)							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
1	1863	MACMILLAN BLOEDEL LIMITED	PORT ALBERNI	594	99	262	57		735	315	90
1	1902	FLETCHER CHALLENGE CANADA LIMITED	CROFTON	3,981	707	526	60	224	971	909	801
1	2708	HARMAC PACIFIC INC.	HARMAC	7,554	509	1,257	43	397	2,178	2,038	1,686
1	3201	CANADIAN PACIFIC FOREST PRODUCTS LIMITED	GOLD RIVER	3,105	315	54	150	218	1,831	1,566	1,240
1	3341	FLETCHER CHALLENGE CANADA LIMITED	ELK FALLS	5,542	611	36	259	398	1,373	1,053	823
1	3760	WESTERN PULP LIMITED PARTNERSHIP	PORT ALICE	2,347	1,222	1,840		93	1,397	1,136	956
2	1647	WESTERN PULP INC.	WOODFIBRE	3,322	279	77	14	149	581	527	420
2	3095	HOWE SOUND PULP AND PAPER LIMITED	PORT MELLON	7,140	1,285	391	9	342	313	282	232
2	3149	MACMILLAN BLOEDEL LIMITED	POWELL RIVER	6,062	1,703	542	85	371	1,763	1,297	1,032
2	7558	MACMILLAN BLOEDEL LIMITED	POWELL RIVER			0					
3	1517	WEYERHAEUSER CANADA LTD.	KAMLOOPS PULP MILL	2,095	377	141	24		2,753	1,769	1,302
3	1775	CROWN PACKAGING LTD.	KELOWNA	3	11	0		0	410	231	174
4	1756	CRESTBROOK FOREST INDUSTRIES LTD.	SKOOKUMCHUCK	19	0	0		2	5	5	5
4	1768	CITIC B.C. INC.	CASTLEGAR	113	1	0		10	28	28	28
4	2149	CRESTBROOK FOREST INDUSTRIES LTD.	SKOOKUMCHUCK	3,285	652	101	42	201	435	249	176
4	3080	CITIC B.C. INC.	CASTLEGAR	1,704	511	752	20	80	254	201	161
5	1578	CARIBOO PULP AND PAPER COMPANY LIMITED	QUESNEL, NORTHSTAR ROAD	6,451	557	1,134	37	336	500	471	374
5	5804	QUESNEL RIVER PULP COMPANY	QUESNEL	24	332	19	0	1	493	198	99
6	3083	WEST FRASER MILLS LTD	KITIMAT	3,888	404	1,242	167	137	1,755	1,597	1,275
6	3547	SKEENA CELLULOSE INC.	PT. EDWARD			2,500	3		2,430	2,082	1,713
7	1644	FLETCHER CHALLENGE CANADA LIMITED	MACKENZIE-PULP MILL	3,311	379	38	39	171	514	456	365
7	2559	NORTHWOOD PULP AND TIMBER LIMITED	PRINCE GEORGE	9,188	454	1,241	40	465	1,599	1,492	1,206
7	2761	CANADIAN FOREST PRODUCTS LTD.	PRINCE GEORGE PULP & PAPER	3,752	332	14	60	160	580	553	444
7	2762	INTERCONTINENTAL PULP COMPANY LTD.	PRINCE GEORGE	2,664	216	353	14	171	284	258	214
7	3647	FINLAY FOREST INDUSTRIES INC.	MACKENZIE	37	505	1		2	35	14	8
7	7779	FIBRECO PULP INC.	TAYLOR	30	150	1		8	291	190	156
7	8998	LOUISIANA-PACIFIC CANADA LTD.	20 KM. E. OF CHETWYND, NORTH OF HWY 97 ON 1A	991	17	6	0	112	9	6	4
7	13538	NORTHWOOD PULP AND TIMBER LIMITED	FRASER FLATS, PRINCE GEORGE, B.C.						42	17	8
			Total =	77,201	11,626	12,529	1,124	4,048	23,559	18,939	14,991

BRITISH COLUMBIA 1995 EMISSION INVENTORY ORGINAL AND REVISED PULP MILL ESTIMATES

Reg.	Permit	Company	Location	% difference between Original and Revised							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
1	1863	MACMILLAN BLOEDEL LIMITED	PORT ALBERNI	-58	-58	-58	-51		-48	-48	-48
1	1902	FLETCHER CHALLENGE CANADA LIMITED	CROFTON	-31	-35	0		-31	-13	-14	-15
1	2708	HARMAC PACIFIC INC.	HARMAC	20	8	0		29	11	11	11
1	3201	CANADIAN PACIFIC FOREST PRODUCTS LIMITED	GOLD RIVER	17	4	6	0	18	0	0	0
1	3341	FLETCHER CHALLENGE CANADA LIMITED	ELK FALLS	-51	-54	-53	-33	-51	-27	-17	-12
1	3760	WESTERN PULP LIMITED PARTNERSHIP	PORT ALICE	28	28			28	4	-2	-2
2	1647	WESTERN PULP INC.	WOODFIBRE	1	0	0		2			
2	3095	HOWE SOUND PULP AND PAPER LIMITED	PORT MELLON	-17	-7	-4		-17			
2	3149	MACMILLAN BLOEDEL LIMITED	POWELL RIVER	-75	-75	-75	-59	-75	-23	-33	-32
2	7558	MACMILLAN BLOEDEL LIMITED	POWELL RIVER								
3	1517	WEYERHAEUSER CANADA LTD.	KAMLOOPS PULP MILL	-13	-13	-50	-9		1	0	0
3	1775	CROWN PACKAGING LTD.	KELOWNA	-71	-71	-71		-71	-71	-71	-71
4	1756	CRESTBROOK FOREST INDUSTRIES LTD.	SKOOKUMCHUCK								
4	1768	CITIC B.C. INC.	CASTLEGAR								
4	2149	CRESTBROOK FOREST INDUSTRIES LTD.	SKOOKUMCHUCK	-32	-24	-17	-16	-36	-28	-26	-26
4	3080	CITIC B.C. INC.	CASTLEGAR	-8				-11			
5	1578	CARIBOO PULP AND PAPER COMPANY LIMITED	QUESNEL, NORTHSTAR ROAD	17	9	1		24	0	4	5
5	5804	QUESNEL RIVER PULP COMPANY	QUESNEL	13	13	13	13	13	13	13	13
6	3083	WEST FRASER MILLS LTD	KITIMAT								
6	3547	SKEENA CELLULOSE INC.	PT. EDWARD								
7	1644	FLETCHER CHALLENGE CANADA LIMITED	MACKENZIE-PULP MILL	18	0	9		27		47	51
7	2559	NORTHWOOD PULP AND TIMBER LIMITED	PRINCE GEORGE	17		11		29			
7	2761	CANADIAN FOREST PRODUCTS LTD.	PRINCE GEORGE PULP & PAPER	-2	-1	-3		-3			
7	2762	INTERCONTINENTAL PULP COMPANY LTD.	PRINCE GEORGE	0	-7	-1		1			
7	3647	FINLAY FOREST INDUSTRIES INC.	MACKENZIE	20	20	20		20	20	20	20
7	7779	FIBRECO PULP INC.	TAYLOR	10	10	10		10	10	10	10
7	8998	LOUISIANA-PACIFIC CANADA LTD.	20 KM. E. OF CHETWYND, NORTH OF HWY 97 ON 1A								
7	13538	NORTHWOOD PULP AND TIMBER LIMITED	FRASER FLATS, PRINCE GEORGE, B.C.								
			% Difference between Totals =	-25	-35	-14	-22	-27	-10	-8	-6

ACKNOWLEDGEMENTS

This 1995 British Columbia emission inventory report was prepared by Tony Wakelin. Tony wishes to thank Dr. Jim McTaggart-Cowan, Hu Wallis, Jackie Hamilton, Bob Beaty, Liz Lilly, Rick Williams, Doug Dryden, and Lynn Bailey of the Air Resources Branch for their guidance, support and patience. A special thank you also goes to Alistair Stewart of the Pollution Prevention Branch for collecting provincial pulp mill data.

In order to produce this report a substantial amount of input was obtained from cooperative education students that worked in the Air Resources Branch (ARB), contractors, and from other agencies as follows:

- Daniel O'Neill, Ryan Kennedy, James Fam, and Robert Gibson cooperative education students who worked with ARB from 1996 - 1998 to produce various emission inventory reports.
- Dr. Michael Rensing, private contractor who developed: data extraction routines for the WASTE database, uploading routines for emission inventory system (EIS) formatted data, and routines for converting data into the format required for the National emission inventory.
- Dr. Neil Shrimpton who was employed by the Air Resources Branch and provided considerable guidance for using Oracle and SQL database techniques for analyzing and summarizing emission inventory data sets.
- Rob Dunlop, Derek Jennejohn, Katherine Cheng, Dr. James Wilkin and other staff at Levelton Associates who worked on agricultural, point source and road dust portions of the inventory under contract.
- David Picard and other staff at Clearstone Engineering who prepared oil and gas industry estimates for this inventory under contract.
- Michelle Walls and Niko Zorkin at Enkon Environmental who assigned source classification codes to permitted sources throughout the Province under contract.
- Mei-Ching Tsoi, Eric Meyer, Donna Goss, Al Waters and John McClarnon of the Ministry of Forests who provided prescribed burning and wildfire data sets.
- Steve Taylor and Karen Sherman of the Pacific Forest Resource Centre who provided guidance for using the results of emission studies performed under the Canada-British Columbia Partnership Agreement on Forest Resources Development, and assigned locations to prescribed fires occurring within the Province.

- Bruce Mackenzie and Sarah Boon of the Ministry Systems Services Branch who assigned waste management region coding to prescribed burning and wildfire data sets using GIS.

- Michael DeAbreu, Marc Deslauriers, Art Jaques, Kenneth Olsen, Frank Nietzert, David Niemi, Dominique Ratte, Bruce Thompson, Christian Vezina, Ed Wituschek, and other staff of Environment Canada who co-managed contract work, and provided emission estimates and guidance for this inventory update.

- Roger Quan, Kelly Der, Chris Voigt, Shelina Sidi, Richard Visser, Ross Shwaikoski, and Kamal Bhattacharyya of the Greater Vancouver Regional District (GVRD) Air Quality Department who developed emission estimates for the Lower Fraser Valley (LFV), co-managed contract work and offered unlimited assistance and guidance for the development of estimates for the rest of the province.

In addition to those noted above input received from various industrial facilities, industrial organizations, crown corporations, government agencies and others is gratefully acknowledged.

COMMENTS?

Comments on this report, and the planned year 2000 inventory would be gratefully received and can be sent to:

Tony Wakelin
Air Emissions Engineer
Air Resources Branch
BC Environment

Mail:
P.O. Box 9341 Stn Prov Govt
Victoria, B.C. V8W 9M1

Location:
3-2875 Jutland Rd.
Victoria

Phone: (250) 356-0634

FAX: (250) 356-7197

e-mail: Tony.Wakelin@gems5.gov.bc.ca

TABLE OF CONTENTS

LIST OF TABLES vi

LIST OF FIGURES vii

LIST OF ACRONYMS viii

1. INTRODUCTION 1

2. PROVINCIAL INVENTORY - OVERALL EMISSIONS 4

3. EMISSION ESTIMATION BASICS 6

4. COMMON CONTAMINANTS - POINT SOURCES 6

5. COMMON CONTAMINANTS - AREA SOURCES 10

6. COMMON CONTAMINANTS - MOBILE SOURCES 14

7. COMMON CONTAMINANTS - NATURAL SOURCES 17

8. GREENHOUSE GASES 18

9. YEAR 2000 UPDATE 21

10. REFERENCES 23

APPENDIX A - Waste Management Region Summaries

- British Columbia
- British Columbia - Excluding Lower Fraser Valley
- Lower Fraser Valley
- Vancouver Island (Region 1)
- Lower Mainland (Region 2) - Including LFV
- Lower Mainland (Region 2) - Excluding LFV
- Lower Mainland (Region 2) LFV Only
- Southern Interior (Region 3)
- Kootenay (Region 4)
- Cariboo (Region 5)
- Skeena (Region 6)
- Omineca Peace (Region 7)

APPENDIX B - Point Source Emissions by Standard Industrial Classification (SIC)

APPENDIX C - Point Source Emissions by Source

APPENDIX D - Area Source Emissions by Process

APPENDIX E - Mobile Source Emissions by Process

LIST OF TABLES

TABLE 2-1 B.C. 1995 Common Contaminant Emission Summary 27

TABLE 2-2 B.C. 1995 Common Contaminants by Waste Management Region 29

TABLE 4-1 B.C. Point Source Emissions by Industrial Category 31

TABLE 5-1 B.C. Area Source Emissions by Category 33

TABLE 6-1 B.C. Mobile Source Emissions by Category 35

TABLE 7-1 B.C. Natural Source Emissions by Category 37

TABLE 8-1 B.C. Summary of Greenhouse Gas Emissions 38

LIST OF FIGURES

FIGURE 1-1 British Columbia Study Area 25

FIGURE 1-2 Lower Fraser Valley Study Area 26

FIGURE 2-1 B.C. 1995 Common Contaminant Emissions 28

FIGURE 2-2 B.C. 1995 Common Contaminants by Waste Management Region 30

FIGURE 4-1 B.C. Point Source Emissions by Industrial Category 32

FIGURE 5-1 B.C. Area Source Emissions by Category 34

FIGURE 6-1 B.C. Mobile Source Emissions by Category 36

LIST OF ACRONYMS

ARB	Air Resources Branch
AP-42	U.S. EPA Compilation of Air Pollutant Emission Factors (see reference 13)
CANBEIS	Canadian Biogenic Emission Inventory System
CCME	Canadian Council of Ministers of the Environment
EC	Environment Canada
FRDA II	Canada-British Columbia Partnership Agreement on Forest Resources Development (see reference 10)
LFV	Lower Fraser Valley
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
EMS	Ministry Environmental Monitoring System
GHGs	greenhouse gases
GIS	geographic information system
GVRD	Greater Vancouver Regional District
HDD	heavy duty diesel
HDDV	heavy duty diesel vehicle
LDD	light duty diesel
LDDT	light duty diesel truck
LDDV	light duty diesel vehicle
LDGT	light duty gasoline truck
LDGV	light duty gasoline vehicle
MC	motor cycle
LTO	landing and takeoff cycle
MSW	municipal solid waste
NO_x	nitrogen oxides
N_2O	nitrous oxide
SO_x	sulphur oxides
TRS	total reduced sulphur
Part	particulate matter
PM_{10}	inhalable particulate matter, particles smaller than 10 microns in diameter
$PM_{2.5}$	fine particulate matter, particles smaller than 2.5 microns in diameter
SCC	source classification code
SIC	standard industrial classification
U.S. EPA	United States Environmental Protection Agency
VkmT	vehicle kilometres travelled
VOCs	volatile organic compounds
WASTE	Ministry permit/approval/fee database system
WMR	Ministry waste management region

1. INTRODUCTION

The Air Resources Branch of the Ministry of Environment, Lands and Parks works to protect and enhance air quality for the health and well being of British Columbians and ecosystem health. In order to achieve this, it is important to know the nature and quantity of substances being released into the atmosphere throughout the province.

While being responsible for producing a province-wide inventory, ARB has been assisted greatly in carrying out this work by the considerable expertise of the Air Quality Department of the GVRD. This Department inventoried all sources within the LFV as well as motor vehicle emissions for the rest of the province. The LFV inventory activities are done to a finer level of detail than for the rest of the Province, due to the fact that almost 50% of the province's people live in that area, and due to the local air quality concerns that have existed for over 25 years, as a result of the local topography and the rapid development and growth in that region.

ARB has also made extensive use of B.C. greenhouse gas (GHG) estimates prepared by the Pollution Data Branch of Environment Canada. These have been adjusted for some sources for which ARB has information that was deemed to be more accurate. Details of the adjustments are provided in this report.

An emission inventory is an accounting of all sources of air pollution within a defined geographic area. The 1995 inventory update provides information on the types of emission sources in B.C., their location, and the quantity of air contaminants released in 1995. A copy of this report is available on the ARB website at http://www.elp.gov.bc.ca/epd/epdpa/ar/index.html. The GVRD has completed 1995 and 1997 emission inventory reports for the LFV.[1,2] These are available from the GVRD Air Quality Department.

Other province-wide inventories have been performed for the years 1985 and 1990. With each inventory update, improvements are made to estimation methods. New source categories are also added as more information becomes available. These progressive improvements make a straight comparison of estimates between the respective 1985, 1990, and 1995 reports misleading because it is not clear if a change in inventoried emissions is due to an actual change in emissions or an estimation methodology change. The reader is therefore strongly advised not to draw conclusions based on comparing separate 1985, 1990 and 1995 inventory reports.

To facilitate an appropriate comparison of past inventories and anticipated future emissions, backcasts to 1985 and forecasts to 2020 are available under separate reports for the LFV[3] and the Province outside the LFV.[4,5] It is anticipated that the results of all these contracts (province with LFV) will be summarized by ARB in one report.

This report presents the 1995 emission inventory for British Columbia. The sections which follow summarize emissions from the multitude of sources in a variety of ways. To avoid repetition, detailed background information on emission estimation methodologies, sources of information, data collection, and other involved topics are not presented here. If further detail is required, the reader is advised to refer to the reports which are listed in the references of this report.[6,7,8,9,10,11]

1.1 STUDY AREA

To interpret the various tables provided in this report, it is useful to know the boundaries used in the 1995 inventory update to define the LFV since some tables are presented with and without LFV inventory data. The LFV is defined in this report as bounded on the north by latitude 49° 30', on the east by longitude 121° 15', on the west by longitude 123° 20', and on the south by the Canada/United States border. Figure 1.2 shows the LFV area.

1.2 CONTAMINANTS INVENTORIED

Where possible the types of common contaminants and greenhouse gases presented in this emission inventory are the same as those used in other provincial inventories, and those used by the U.S. Environmental Protection Agency. However, the total reduced sulphur (TRS) contaminant category was added due to the number of pulp mills, and oil and gas sources that are present in the province. The type of emissions included in this report are as follows:

Common Contaminants

- **carbon monoxide (CO);**
- **nitrogen oxides (NO_x)** – including nitric oxide (NO) and nitrogen dioxide (NO_2), reported as NO_2 equivalent;
- **sulphur oxides (SO_x)** – includes sulphur dioxide (SO_2) and sulphur trioxide (SO_3), reported as SO_2 equivalent;
- **total reduced sulphur (TRS):** - includes hydrogen sulphide (H_2S), methyl mercaptan (MeSH), dimethyl sulphide (DMS) and dimethyl disulphide (DMDS);
- **volatile organic compounds (VOCs)** – any organic compound which participates in atmospheric photochemical reactions, but

excluding methane, ethane, methyl chloroform, methylene chloride, CFC-113, CFC-114, CFC-115, CFC-11, CFC-12, CFC-22, FC-23, HCFC-123, HCRC-141b, HCFC-142b, and HFC-1341 (excluded because of their negligible photochemical reactivity); and

- **total particulate matter (Part):** or total suspended particulate matter of all sizes; include emissions of PM_{10} and $PM_{2.5}$, described as follows:
  - **PM_{10}** – particulate matter with aerodynamic diameters less than or equal to 10 micrometers. This group can be considered inhalable particulate;
  - **$PM_{2.5}$** – particulate matter with aerodynamic diameters less than 2.5 micrometers. This group can be referred to as the fine fraction of PM_{10}, or respirable particulate matter.

It should be noted that, for this emission inventory, only primary emissions of PM_{10} and $PM_{2.5}$ are quantified. Primary emissions are those which are emitted directly to the atmosphere from a source. Secondary fine particulate matter forms in the atmosphere from a complex series of interactions between primary emissions of particles and gases. While the emission inventory does not attempt to quantify secondary emissions, the primary emissions data is used as an input to current efforts to model secondary particulate formation.

Greenhouse Gases

- **carbon dioxide (CO_2);**
- **methane (CH_4); and**
- **nitrous oxide (N_2O).**

The above three gases can also be referred to as principle greenhouse gases. Other GHGs such as carbon tetrafluoride (CF_4), carbon hexafluoride (C_2F_6), and sulphur hexafluoride (SF_6) are not included in this report since the GVRD did not include these contaminants in with the LFV estimates, and estimates for B.C. are available from Environment Canada.[12]

1.3 SOURCE CATEGORIES

The 1995 inventory update is divided into the following source categories:

- **point sources** - industrial facilities that operate under air discharge permit issued under the Ministry Waste Management Act, Solid Waste

Management Plan authorized by the Minister (of Environment, Lands and Parks), or air discharge permit issued under GVRD Air Quality Management Bylaw No. 725.

- **area sources** - prescribed burning, light industrial, residential, commercial and institutional sources which are normally not required to obtain an air discharge permit. Emissions from these individual sources are small compared to the point sources but can be significant when considered collectively.

- **mobile sources**:

    - on-road motor vehicles - this group consists primarily of mobile sources involved in the transportation of people and goods, including passenger cars, trucks and motorcycles.

    - off-road sources - other mobile sources, including aircraft, marine vessels and railways, off-road vehicles and small off-road engines (such as agricultural, lawn and garden, construction, or recreational equipment).

- **natural sources** - occur in nature without the influence of human beings (nonanthropogenic). Includes categories such as wildfires, biogenics (plants), wildlife and marine aerosol.

2. 1995 PROVINCIAL INVENTORY - OVERALL EMISSIONS

This section presents the consolidated results of the 1995 common contaminant emission inventory for the province.

2.1 OVERALL 1995 PROVINCIAL EMISSION INVENTORY RESULTS

Table 2-1 shows the overall emission inventory data for the five common air contaminants. The pie charts in Figure 2-1 provide a graphic illustration of each contaminant excluding road dust and natural sources. Road dust is excluded because there is large uncertainty associated with estimating these emissions. Natural sources are excluded because they are not controlled by air management strategies.

Point sources account for 58% of particulates and relatively large proportions of PM_{10} and $PM_{2.5}$ at 56% and 51% respectively. These sources also account for 55% of SO_x. The contribution of point sources to CO, NO_x and VOC is lower at 38%, 25% and 21%. Point sources also account for 63% of TRS emissions. A further break down of point sources is provided in Table 4-1.

Area sources contribute 51% to VOCs. These sources also contribute fairly large quantities of particulate, PM_{10} and $PM_{2.5}$ at 31%, 27% and 29% respectively. Contributions to SO_x emissions are fairly significant at 30%. The area source contributions to CO and NO_x are relatively low at 20% and 8%. For TRS area sources account for 37% of provincial emissions. Further break down of area sources is provided in Table 5-1.

Mobile sources account for 67% of NO_x emissions, and 42% of CO. VOC emissions that can be attributed to mobile sources are also relatively high at 28%. The contributions to SO_x, Particulate, PM_{10} and $PM_{2.5}$ are fairly low at 15%, 11%, 17%, and 20% of the respective provincial totals. Table 6-1 provides a further break down of mobile sources.

2.2 BREAKDOWNS BY GEOGRAPHIC AREA

For the province outside the LFV, the 1995 emission inventory update is divided into seven BC Environment waste management regions (WMRs) for common contaminants as shown in Table 2-2. More detail on emissions for each WMR can be found in Appendix A.

The Omineca-Peace WMR accounts for the largest share of emissions in the province compared to the other regions (note that the LFV emissions are included in with the Lower Mainland WMR). Approximately 62% of SO_x, 48% of TRS, 29% of particulate, and 25% of CO released in the province originates in this area. The PM_{10} and $PM_{2.5}$ fractions of particulate are also both quite high at 27% of the totals.

For other WMRs outside the Omineca-Peace the order of which region releases more emissions compared to others changes with each contaminant:

- For CO the Lower Mainland WMR contributes 20%. Vancouver Island and the Southern Interior are next with 16%. Other regions each contribute 9% or less.
- The Lower Mainland contributes 31% of NO_x followed by Vancouver Island which contributes 20%. Other WMRs contribute 11% or less.
- For SO_x the Kootenay WMR accounts for 11%. The Lower Mainland, Vancouver Island, and Skeena each account for 8%. Other WMRs contribute less than 2% each.
- Vancouver Island contributes 30% to total TRS emissions. Other regions each contribute 9% or less.
- For VOCs the Lower Mainland contributes 24%, followed by Vancouver Island at 16%. Releases from the Southern Interior are also relatively high at 14%. Other regions each contribute 7% or less to the total.
- Particulate and PM_{10} emissions are relatively evenly distributed between regions with each accounting for between 10% and 16%. $PM_{2.5}$ is similar with a spread of 9% to 16% for each region.

For greenhouse gases (GHGs) breakdowns are available for the LFV and the rest of the Province (as shown in Table 8-1). The LFV estimates were prepared by the GVRD.[1] Most Provincial GHG estimates in this report have been prepared by Environment Canada.[12] Some adjustments were made based on more current information as described in this report. GHG estimates for the province outside the LFV are a subtraction of the Environment Canada estimates (with adjustments) and those prepared for the LFV. Since the available GHG estimates are prepared using provincial fuel sales data and similar data sets, breakdowns by waste management region are not provided in this report.

3. EMISSION ESTIMATION BASICS

The techniques used for estimating emissions differ for common contaminants and greenhouse gases. Common contaminant estimates are usually done using a "bottom up" approach where each source is identified, estimated and added to the data set. An example of this is where a particular facility under permit is inventoried using stack monitoring results.

GHGs are usually estimated using a "top down" approach. For example CO_2 estimates prepared by Environment Canada are based on the amount and type of fuel sold to an industrial group such as natural gas for power generation. Since fuel sale statistics are not tracked for every facility, the fine level of detail that is available using bottom up methods are not available when the top down approach is used. Unlike the rest of the Province, LFV GHG emissions were estimated simultaneously along with the common contaminants using a bottom up approach.

The bottom up and top down approaches to emission inventory compilation make it difficult to merge common contaminant and GHG data sets into a common format. Therefore, this report presents the common contaminant and GHG data separately. The sections which follow pertain to compilation of the common contaminant inventory. Following this GHG estimates are described.

4. COMMON CONTAIMINANTS - POINT SOURCES

In 1995 there were a total of 1284 permitted sources operating within the province. The Ministry issued 918 of these permits and the rest were issued by the GVRD.

4.1 POINT SOURCE METHODOLOGY

Different estimation techniques were used for point sources which are physically located outside and within the LFV. For areas outside the LFV, the Ministry permit fee system (known as WASTE) was used as a starting point. WASTE data was summarized for each industrial process to facilitate the assignment of source classification codes (SCCs) which can be used to link in emission factors and PM_{10} and $PM_{2.5}$ fine particulate fractions.* The data contained in WASTE is based on either a permit limit (flow rate times x concentration x duration) or the use of an emission factor (base quantity such as production x emission factor).

Data contained in WASTE is likely to be an over estimation for most permits. There are three main reasons for this. The first one applies to cases where a ceiling emission flow and concentration is specified in a permit. For these cases if a permittee does not meet the limits they may be placed on the Ministry noncompliance list in addition to facing possible prosecution. Therefore, many permittees pay a premium in fees for higher permit limits in order to avoid these consequences. The second reason for over estimation is that ceiling base quantities are used in most cases for emission factor calculations. In practice however, actual base quantities may be lower. The third reason WASTE estimates can be inflated is that most assume uninterrupted operation. In reality, a given facility can be down for such things as equipment upgrades, routine maintenance, or holidays.

When the standard industrial classifications (SICs) contained in WASTE are used to group the permits, pulp & paper, wood industries, natural gas processing, pipeline transport, mining, and primary metal production account for over 85% of all the criteria contaminants released. Therefore, the WASTE estimates for these groupings were adjusted. With the exception of the pulp and paper group, these adjustments were based on data obtained by Levelton from specific companies and industrial organizations. Pulp and Paper emission estimates were obtained by the Industrial Pollution Prevention Section of the Ministry from each mill as part of a project aimed at assessing the release of contaminants to all environment media (water, soil and air).

The reduction in emission estimates as a result of the adjustments are as follows:

• CO	0 %
• NO_x	43 %
• SO_x	16 %
• TRS	61 %
• VOC	6 %
• Particulate**	20 %

** As well as PM_{10} and $PM_{2.5}$

The GVRD performed a more rigorous emission inventory for sources that

---

* For the PM_{10} and $PM_{2.5}$ emissions determined as part of this inventory, the add on control technologies (such as cyclones, electrostatic precipitators and the like) are unknown. Most add on controls are more effective at removing size fractions greater than PM_{10} compared to smaller size fractions. Therefore, the PM_{10} and $PM_{2.5}$ estimates presented in this report are anticipated to be below what was actually released.

operated in the LFV. Questionnaires were sent to all permitted facilities. In addition to using the responses to questionnaires, the following information was used in order of decreasing confidence to determine appropriate emission estimates:

- continuous monitoring data
- discrete monitoring data
- calculations based on the amount of material entering and exiting the process,
- emission factors (such as AP-42[13]), and
- permit limits.

In some cases several estimates were determined based on each of the above methods to confirm the final estimate.[1]

4.2 POINT SOURCE EMISSIONS IN 1995

The various industrial sectors covered under point (or permitted) sources within the 1995 emission inventory are summarized in Table 4-1. In the table each of the industrial categories is grouped by two digit standard industrial classification code. A more complete description of the emission sources covered by each code is as follows:

Wood Products (SIC 25)
- beehive burners,
- sawmills,
- plywood/particleboard production, and
- other wood industries.

Paper and Allied Products (27)
- pulp mills,
- newsprint, and
- corrugated box production.

Mining (06)
- bituminous coal,
- copper and copper-zinc,
- nickel-copper,
- silver-lead-zinc,
- gold, and
- other.

Logging (04)
- open burning.

Primary Metal Manufacturing (29)
- primary production of aluminum,
- primary smelting and refining of non-ferrous metals (lead and zinc), and
- iron foundries.

Refined Petroleum and Coal Products (36)
- refined petroleum products production, and
- other petroleum and coal products industry (such as asphalt plants).

Non-metallic mineral products (35)
- hydraulic cement production,
- ready-mix concrete production,
- primary glass and glass containers,
- lime production (quicklime and hydrated lime), and
- other non-metallic mineral production (such as clay products).

Pipeline Transport (46)
- natural gas, and
- crude oil.

Power Generation and Other Utility (49)
- electric power generation,
- other utility (such as refuse incineration).

Crude Petroleum and Natural Gas Processing (07)
- conventional crude oil and natural gas production.

Other
- miscellaneous sources that contribute relatively small emission amounts.

Table 4-1 shows that the wood products industry produced most of the CO, VOC and particulate (including PM_{10}, $PM_{2.5}$ size fractions) emissions accounting for between 50% and 73% of each contaminant. The paper and allied products sector also accounts for a high proportion of these emissions - between 10 and 30% of each contaminant.

For nitrogen oxides paper and allied products account for 28%, mining 15%, crude petroleum & natural gas processing 14%, wood products 10% and non-metallic mineral products 10%. The remaining categories account for 23% of NO_x emissions.

For TRS emissions, the paper and allied products industry account for 92% of the total. Crude petroleum & natural gas processing produced the remaining 8% of TRS.

5. COMMON CONTAIMINANTS - AREA SOURCES

Area sources include all other stationary sources which are not regulated under Ministry or GVRD permit. The following major categories are included:

- prescribed burning - the knowledgeable application of fire to a specific land area to accomplish predetermined forest management or other land use objectives (as defined by the National Research Council Canada in the Glossary of Forest Fire Management Terms (Fourth Edition 1987)).
- space heating - the combustion of natural gas, fuel oil or wood to provide building heat or hot-water in a residential, commercial, or institutional setting.
- agricultural - includes emissions from the application of fertilizers and pesticides, farm animals, and from sources of fugitive emissions such as tilling and wind erosion of soil.
- oil and gas - includes emissions associated with upstream (extraction, processing, transport, storage, accidents and equipment failures) and downstream (refining, transfer and storage) operations that are not covered under permit.
- solvent evaporation - includes consumer products (aerosol and household products, etc.), paint application, metal degreasing, glues, adhesives and sealants, and dry cleaning.
- miscellaneous burning - includes agricultural burning, back yard burning, structural fires, biomedical/crematorium/animal incineration.
- other - a catch-all for miscellaneous sources such as gravel pits, cut-back asphalt, landfills, construction and demolition, welding, food preparation, breweries, welding and tobacco.

5.1 AREA SOURCE METHODOLOGY

For the 1995 inventory, area sources are a collection of many small points of air pollution which are not covered by specific BC Environment air discharge permits. Because these sources are too small and/or too numerous to be surveyed and characterized individually, all area source activities must be identified and emissions from these activities collectively estimated.

Most of the area source emissions were calculated as the product of a base quantity and an emission factor. An emission factor is a representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. The general equation for emission estimation is:

$$E = BQ \times EF$$

E = emissions (kg of pollutant released)
BQ = base quantity (kg of substance consumed)
EF = emission factor (kg of pollutant/kg of substance)

The majority of the emission factors used were from the U.S. EPA publication, "AP-42, Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources."[13]

5.1.1 Prescribed Burning

Estimates of land area prescribed burned in 1995 for each application were obtained from the Silviculture Branch of the Ministry of Forests. The emission estimation methodology was obtained from the results of Canada - British Columbia partnership study agreement (FRDA II)[10]. When determining prescribed burning emissions, the amount of fuel present in a given land area was determined using the results of the FRDA II study. The FRDA II study presents the amount of fuel wood consumed as a result of prescribed burning for a number of provincial biogeoclimatic zones. To determine 1995 emissions, each prescribed burn land area listed by forestry was assigned to the appropriate zone in order to calculate the amount of fuel wood burned. Emissions were then calculated by applying emissions factors from the FRDA II study or the U.S. EPA AP-42 publication as appropriate.

5.1.2 Space Heating

Provincial total space heating fuel use quantities for natural gas, propane, and fuel oil were obtained from the Statistics Canada Quarterly Report on Energy Demand.[14] The LFV-rest of province splits were determined by contacting the various fuel distributors. Residential fuel wood quantities were determined as part of a Canadian Facts survey. Applicable AP-42 factors were then used to calculate emissions.

5.1.3 Agricultural

Agricultural source emission estimates were prepared under a contract which was jointly funded by Environment Canada, the GVRD, and BC Environment.[8] Emissions were based on the application of emission factors to base quantities such as livestock and wildlife populations, and crop areas obtained from Statistics Canada, Agriculture and Agri-Food Canada and the BC Ministry of Agriculture and Food.

5.1.4 Oil and Gas

Area source oil and gas industry emissions were determined under contract by Clearstone Engineering and Levelton Associates.[9] Upstream and downstream sources which are not covered under permit were included. In order to estimate emissions various activity statistics, equipment inventories, production and distribution volumes, and venting statistics were researched. In addition to the emission factors that are available in AP-42, a multitude of publications, including the results of previous work that Clearstone has done for Alberta were used.

5.1.5 Solvent Evaporation

Solvent evaporation estimates were based on various base quantity/emission factor calculations. The emission factors were readily available in AP-42. However, base quantity information had to be obtained from a number of different sources such as: technical studies conducted under the CCME NOx/VOC Management Plan, the Canadian Paint and Coatings Association, Law-Sigaurdson's forecast of VOC Emissions, a CHEMInfo Services study, and BC Statistics.

5.1.6 Miscellaneous Burning

Miscellaneous burning includes back yard burning, structural fires, and biomedical/crematory/animal incineration. For the province outside the LFV, back yard burn estimates were based on U.S. EPA estimates of the quantity of waste burned in rural areas. LFV estimates are based on the number of municipal burning permits issued. Agricultural burning emissions were estimated under contract (by Levelton).[8] Statistics retained by the Office of the Fire Commissioner were used to determine the number of structural fires in 1995. The amount of material burned per structural fire and associated emission factors were obtained from a California Air Resources Board Study. The biomedical and other types of incineration under area sources were estimated using a 1990 study performed by Levelton.

5.1.7 Other

Information from many different sources were required to estimate a collection of area sources collectively categorized as other:

- Gravel pit emissions were based on an estimate of the number of gravel pits in B.C., a limited throughput survey, and emission factors.
- Cutback asphalt releases were based on information supplied by the Ministry of Transportation and Highways and the results of a U.S. EPA calculation.

- Environment Canada greenhouse gas estimates and California Air Resources Board speciation profiles were used to estimate landfill emissions.
- Fugitive emissions from construction/demolition were based on building permits issued and an emission factor.
- Welding emissions were estimated in a previous Prince George emission inventory study [15] which included a survey of electrode quantities used. The total weight of welding electrodes used was scaled up by the number of shops which operate outside Prince George and emission factors were applied as appropriate.
- Food preparation emissions include meat cooking and bakeries.
- Emissions associated with meat cooking were estimated from Statistics Canada meat consumption data and American Chemical Society emission factors.
- Bakery emission estimates were based on Canadian bread consumption statistics.
- Brewery emissions for the LFV come under permit. For the rest of the province, emission estimates were based on relative production volumes.
- Tobacco emissions were based on B.C. tax revenue records and U.S. EPA emission factors.

5.2 AREA SOURCE EMISSIONS IN 1995

Area source emissions are summarized in Table 5-1. Prescribed burning is the highest contributor for CO (64%) and particulate (28%). The contribution to PM_{10} and $PM_{2.5}$ fractions tend to increase because prescribed burning is a combustion source. The relative contributions to these size fractions are 37 and 43%. Space heating emissions contribute substantial quantities of CO, NO_x, VOC and particulate respective contributions are 34%, 35%, 26%, and 18%. Again since space heating is a combustion source the PM_{10} and $PM_{2.5}$ contributions are higher than for particulate. Relative contributions are 33% and 40%.

Agricultural sources were shown to emit high quantities of particulate (32%). However, since most of the emissions are due to wind blown dust the contributions of PM_{10} and $PM_{2.5}$ are lower at 22% and 11%.

Oil and gas sources account for 46% of NO_x, 98% of SO_x and 36% of VOC. Contributions to other contaminants from this category are relatively low.

Solvent evaporation accounts for 19% of VOC releases. The various sources covered under the other category contribute 21% of particulate. However, the contributions to other contaminants (including PM_{10} and $PM_{2.5}$ particulate fractions) are 5% or less.

6. COMMON CONTAIMINANTS - MOBILE SOURCES

Mobile emission estimates cover on-road and off-road sources which include:

- on-road motor vehicles
- railways
- marine vessels
- aircraft
- off-road vehicles and engines

6.1 MOBILE SOURCE METHODOLOGY

6.1.1 On-road Motor Vehicles

Emissions for on-road motor vehicles are typically estimated as the product of an emission factor (grams of contaminant per vehicle kilometre traveled) and the number of kilometers traveled (VkmT) for each vehicle category. The vehicle categories include six light duty and two heavy duty classes.

The factors used in the 1995 emission inventory were developed by the GVRD using the Canadian modified US EPA MOBILE 5C model and the PART 5 model.

Estimates for VkmT outside the LFV were obtained from Environment Canada. LFV estimates were generated by the GVRD using their Regional Transportation and Emission Modeling System.

6.1.2 Road Dust

Road dust is formed when material that has settled on a roadway is entrained into the atmosphere due to vehicle traffic. Road dust is a composition of crustal materials (soil), vegetation, tire and brake dust, road materials, and any other material that settles on a roadway.

There is considerable uncertainty associated with the estimation of road dust. Therefore, separate contracts were issued to estimate road dust for the LFV and the rest of the Province.[16,17] Estimation techniques used in the Pacific northwest region of the United States were reviewed before concluding that the U.S. EPA AP-42 estimation method is most appropriate for B.C..

Inputs to the AP-42 method are silt loading data, vehicle weight data, and vehicle kilometres travelled (VkmT). For unpaved roads, an additional parameter that is added to the model is rainfall data which is available through Environment Canada. Silt loading samples for the LFV and the rest of the province as collected under contract were used.[18,19] Vehicle weight data was calculated based on typical model inputs used by the U.S. EPA and the VkmT mix by vehicle type.

It should be noted that silt loading can vary seasonally and road dust samples collected throughout the Province were obtained during the Spring of 1997. To account for seasonal variation, the U.S. data was reviewed. A data set from Pocatello Idaho shows that summertime silt loading is about half of the spring and fall peaks. Therefore, similar adjustments were made for WMRs 3-7. Adjustments were not made for the rest of the Province where rainfall is fairly high and traction material is not usually applied during winter months.

In addition to the model inputs, Environment Canada added a level of sophistication to the road dust estimates by using GIS to divide the province into 10 km by 10 km grid squares. From here the road network was divided into several categories and data from several hundred snow and rainfall stations were used to assign correction days as appropriate.

Although the best available data and methods were used to estimate road dust, considerable uncertainties remain in the estimates. Therefore, many of the tables presented in this report do not include road dust.

6.1.3 Railways

Estimates for passenger and freight railways were based on fuel consumption data from Statistics Canada.[14] Divisions between the Province and the LFV were determined using the ratio of the length of track. The emission factors applied are from the Railway Association of Canada report entitled: "1995 Locomotive Emission Monitoring Programme."

Fugitive losses of coal dust from trains were estimated using emission factors and the amount of coal transported by rail.

6.1.4 Marine Vessels

The following categories of vessels were included in this inventory:

- ocean going,
- harbour vessels such as tugs, work and charter boats,
- ferries,
- fishing vessels, and
- recreational vessels.

Estimates for marine vessels were based on fuel consumption data obtained from the operating agency or data contained in industry directories. Applicable factors were obtained from Lloyds of London, Booz Allen & Hamilton and Environment Canada.

6.1.5 Aircraft

Estimates of emissions for aircraft are based on the number of landing and takeoff (LTO) cycles for each of the following aircraft types:

- helicopters,
- turboprops,
- commercial piston,
- general piston,
- commercial jets,
- government civil jets, and
- military jets.

Emission factors for each LTO cycle were obtained from the US Federal Aviation Administration Aircraft Engine Emission Database, and the U.S. EPA AP-42 publication. LTO data was supplied from the operating Authority for the Vancouver International Airport. For other smaller airports, LTO data was obtained from Transport Canada.

6.1.6 Off-Road

Off-road vehicles and engines include the following:

- agricultural equipment,
- lawn and garden equipment, and
- construction and utility equipment.

The agricultural equipment sector includes gasoline and diesel farm tractors and harvesters. Emission estimates were prepared by Levelton under a contracted study to develop an agricultural source emission inventory for the province.[8] Emissions were calculated using Statistics Canada fuel consumption data[14] and U.S. EPA AP-42 emission factors.

Lawn and garden equipment includes lawnmowers, and utility equipment such as edge trimmers and leaf blowers. The number of units used in the province was based on an Environment Canada lawn mower use study. Assumptions were made with respect to horsepower ratings and hours of use. Emission factors were from AP-42.

Construction and utility equipment include bulldozers, graders, scrapers, loaders and tractors (non-agricultural). Emission estimates are based on Statistics Canada fuel consumption data, AP-42 factors and B.C. fuel sulphur levels.

6.2 MOBILE SOURCE EMISSIONS

The 1995 mobile emissions are summarized in Table 6-1. Light duty vehicles account for the majority of CO and VOC at 87% and 78% of the totals. The contribution of light duty vehicles to NOx is 26%. Contributions to SOx, particulate, PM_{10} and $PM_{2.5}$ are 6% or less for light duty vehicles. Heavy duty vehicles contribute 15% of total NOx and less than 8% of the remaining contaminants.

Railways produce substantial quantities of particulates including the PM_{10} and $PM_{2.5}$ fractions at about 70% for each of these contaminants. The NOx emissions attributable to railways are also significant at 18%. For other contaminants railways contribute 8% or less to the totals.

Marine vessels were shown to contribute 83% of total SOx emissions. NOx emissions attributable to these vessels are also significant at 35%. For particulates, PM_{10} and $PM_{2.5}$ marine vessels contribute 13%.

The aircraft and off-road categories contribute relatively low amounts for each contaminant. Total contributions are 7% or less.

7. COMMON CONTAIMINANTS - NATURAL SOURCES

In the strict definition, "natural source" emissions occur in nature without the influence of human beings and are also referred to as nonanthropogenic. The 1995 inventory update inclusion of forest wildfires under this category can be misleading since about 70% of such fires are caused by humans. The rest are caused by lightning strikes. However, considering that wildfires are rarely caused intentionally, are extinguished as fast as possible, and do not have a desired end product in terms of how much land area is to be burned, it was decided to include them with other natural sources.

The location and amount of area burned for each wildfire occurring in 1995 was obtained from the Protection Branch of the Ministry of Forests. Emission factors and final estimates were based on the FRDA II study as described for prescribed burning (in section 5.1.1).[10]

In the 1995 inventory, the release of volatile organic and nitrogen oxide emissions from trees, grass and other vegetation are referred to as biogenics. Estimates were calculated by Environment Canada using the Canadian Biogenic Emission Inventory System (CANBEIS). Under this system various land cover types are mapped into a geographic information system (GIS). The mapped data is integrated with weather data to calculate the amount of biogenic emissions for each land cover type.

Wildlife emissions were estimated as part of the Levelton agricultural sources contract.[8] The estimates were based on animal population statistics provided by the B.C. Ministry of Environment, Lands and Parks and emission factors.

Marine aerosol emissions were calculated using estimation formulas which consider wind speed, length of coast line, and sea area.

7.1 NATURAL SOURCE EMISSIONS IN 1995

Natural source emissions are summarized in Table 7-1. Wildfires account for all of the CO and SO_x as well as most of the particulates, PM_{10} and $PM_{2.5}$ with 73%, 71% and 93% of the respective totals. It should also be noted that wildfires account for 32% of natural source NO_x emissions.

Biogenics account for 68% of NO_x, and over 99% of VOC emissions. Marine aerosol accounts for 27% of particulate, 29% of PM_{10} and 7% of $PM_{2.5}$.

8. GREENHOUSE GASES

The estimates presented in the Trends in Canada's Greenhouse Gas Emissions 1990 - 1995 (April, 1997) report, prepared by Environment Canada, were used for most of the figures presented in this report. To facilitate a finer breakdown between the rest of the province and the LFV, a more detailed spread sheet that was used to prepare the Trends report was provided by Environment Canada. Some adjustments were made to the Environment Canada estimates as follows:

- Upstream oil & gas (SIC 07), and natural gas transmission (SIC 46) - Clearstone Engineering and Levelton Associates completed detailed 1995 Upstream and Downstream Oil and Gas Emission Estimates for the province as of January 1998.[9] It should be noted that these more detailed estimates were prepared by David Picard who also developed the estimates for the Trends report. Estimates developed as part of a permitted source review completed by Levelton as of November 16, 1998 were also available. Since the B.C. specific estimates were prepared to a more intricate and complete level of detail, they were used in preference to the earlier figures in the Trends report.

- The 1995 LFV emission inventory includes CO_2 releases from biomass. However, the provincial GHG releases prepared by Environment Canada exclude the contribution from this combustion source in accordance with international convention. Although biomass CO_2 emissions are not part of international GHG stabilization and reduction targets, at this time, they are of interest to B.C. Environment. Of particular interest is the quantity of CO_2 from biomass fuel compared to more traditional fossil fuels.

Therefore, the estimates prepared by EC are included in this report. Additions were also made for agricultural burning and backyard burning sources which are not included in the Trends report but are readily available as part of estimates prepared for or by the GVRD and ARB.

- Agricultural N_2O, from manure is not included in 1995 Trends report estimates. However, since this source is to be included in the 1996 Trends report (in accordance with the revised Intergovernmental Panel on Climate Change guidelines) it was added to the 1995 Trends data. For this addition the 1996 estimates as prepared by Environment Canada were used for 1995. The addition of this source results in an increase in overall N_2O provincial emissions of about 30%.

It should be noted that agricultural common contaminant and GHG estimates were completed under contract by Levelton as of September 1996.[8] A copy of the report for the Levelton contract was provided to Environment Canada as background for developing the 1995 Trends report, published April 1997. With the exception of adding agricultural burning, GHG data presented in the Levelton report was not used to make further adjustments to the 1995 Trends data.

With the LFV/rest of province breakdown, it was not possible to separate point source GHG emissions for some SIC groupings. Groups 25 (wood products) and 27 (paper and allied products) are combined in the table that was provided by Environment Canada so that separation of these categories was not possible. For SIC groupings 35 (non-metallic mineral products) and 29 (iron and steel) the numbers presented are incomplete as the process data is considered confidential by Statistics Canada. The Environment Canada trends report deals with this by not showing enough detail for this anomaly to appear. For the tables provided in this report, the other category includes process information for SIC groupings 35 and 29.

Caution should be used when interpreting the greenhouse gas numbers presented in this report. The intent of the numbers presented here is to have a breakdown between the LFV and the rest of the province, not to present definitive estimates that are to be used for setting and tracking progress under greenhouse gas agreements such as the Kyoto protocol. The results presented in the Trends report as supplied by Environment Canada should be used as the official estimates for B.C. not the estimates presented in this report.

8.1 GREENHOUSE GAS EMISSIONS IN 1995

Greenhouse gas emissions are summarized in Table 8-1. It should be noted that where possible the category descriptions match those used by Environment Canada in the Trends report. Unfortunately, these descriptions do not always match those used in the common contaminant inventory.

The text on GHG estimates which follows is general. Since there are cautions to be noted with the numbers presented, percentages are not calculated in the Table 8-1 or quoted in this text.

It should be noted that some of the estimates in this report and the emission totals do not match the Trends report because of the adjustments that were made.

8.1.1 Point Sources

The wood industry and paper & allied products industry accounts for the largest share of CO_2, followed by the oil and gas production industry. Other significant CO_2 sectors are oil and gas transmission, chemical products, and non-metallic mineral products. It should be noted that emissions listed under other also include process emissions from iron and steel, and non-metallic mineral products. If these process emissions are included under the SIC 291 and 35 groupings, it is likely that the ranking order would change.

Point source biomass CO_2 is only noted to originate from the wood industry, and paper & allied products industry.

The mining industry accounts for most of the point source CH_4. Oil and gas production is also quite dominant. Other sources contribute relatively small amounts of this contaminant.

Virtually all the point source N_2O is from the wood industry, and paper & allied products categories. The other categories have relatively low contributions.

8.1.2 Area Sources

Residential fuel use contributes the highest proportion of area source CO_2. Commercial fuel use and upstream oil and gas are also large contributors to the total CO_2 for area sources.

Municipal solid waste (MSW) landfills account for over half of the CH_4 from area sources. Agricultural manure is also a significant source of CH_4 (note that this was added to the Environment Canada Trends report data). Releases from upstream oil and gas, and natural gas distribution are also quite significant contributors. Other area source categories contribute relatively low amounts of CH_4 to the area source total.

Most of the area source N_2O can be attributed to agriculture (manure and fuel use), and agriculture fertilizer use. Slash burning (listed as prescribed burning in the common contaminant inventory) also contributes to the N_2O and CH_4 totals. Other sources such as anesthetics/propellants and agricultural burning contribute relatively small amounts.

Area source biomass CO_2 is noted to originate from residential fuel use, and slash burning (or prescribed burning). Agricultural burning, MSW landfill burning, back yard burning and waste water treatment contribute relatively small amounts.

8.1.3 Mobile Sources

For mobile sources, gasoline vehicles contribute most of the CO_2, CH_4 and N_2O. Diesel vehicles, in particular heavy duty (HDD), are the next highest contributors. The contributions from other diesel use, aircraft, marine and railway are also significant.

Off-road gasoline, propane vehicles, and natural gas vehicles contribute relatively low amounts to the mobile source totals for CO_2, CH_4 and N_2O.

9. YEAR 2000 UPDATE

ARB is in the initial stages of planning for the year 2000 common contaminant emission inventory update. Since we are not likely to see increased Ministry resources for this task, we are investigating ways of streamlining data collection.

Some options that will be considered for permitted sources are:

1. Direct data requests to industry or industry organizations such as the Canadian Council of Forest Industries (COFI), B.C. Mining Association, Canadian Gas Association and other such organizations.

2. Setting up the Ministry Environmental Monitoring System (EMS)* to accept air emission data directly from permittees.

3. Combine reporting with the National Pollutant Release Inventory by inserting a common contaminant inventory questionnaire with the NPRI reporting package.

---

* EMS was designed to record the results of physical/chemical and biological analysis performed on air, water and solid discharges at permitted waste discharge sites, and ambient monitoring locations throughout the Province. EMS is intended to be an efficient and effective tool to facilitate the capture, storage, retrieval, compilation and analysis of environmental data.

Most of the area and mobile source common contaminant emissions were inventoried in house for the 1995 update. It is anticipated that for the most part ARB will rely on estimates prepared by the GVRD and Environment Canada for the year 2000 update. Exceptions to this may be for sources that are particularly dominant for B.C. or have a high degree of uncertainty such as prescribed burning, wildfires and road dust.

For greenhouse gas emission estimates, ARB will continue to use the estimates provided by Environment Canada. We will of course work with Environment Canada to improve estimates where possible. In addition to this, we will strive to obtain more detail for the GHG estimates in order to help guide provincial stabilization/reduction initiatives.

10. REFERENCES

1. 1995 Emission Inventory for the Lower Fraser Valley Airshed, Greater Vancouver Regional District and Fraser Valley Regional District, March 1998.

2. 1997 Emission Inventory for the Lower Fraser Valley Airshed, Greater Vancouver Regional District and Fraser Valley Regional District, July 1998.

3. Forecast and Backcast of 1995 LFV Emission Inventory Final Report, prepared for: Greater Vancouver Regional District, by Levelton Engineering Ltd., May 14, 1998.

4. Review and Forecast/Backcast of 1995 British Columbia Point Source Emission Inventory (Outside the LFV), prepared for: B.C. Ministry of Environment, Lands and Parks, by Levelton Engineering Ltd., Revised November 16, 1998.

5. Forecast and Backcast of 1995 British Columbia Area and Mobile Source Emission Inventory (Outside the LFV), prepared for: B.C. Ministry of Environment, Lands and Parks, by Levelton Engineering, January 15, 1999.

6. British Columbia Inventory of Common Air Contaminants Emitted in 1995 from Point Sources Outside the Lower Fraser Valley, prepared by Daniel O'Neill for B.C. Ministry of Environment Lands and Parks, August 1996 - Revised November 1996.

7. British Columbia Inventory of Common Air Contaminants Emitted in 1995 from Miscellaneous Area Sources Outside of the Lower Fraser Valley, prepared by Robert Gibson for B.C. Ministry of Environment, Lands and Parks, January 1998.

8. Emission Inventory of Agricultural Sources in British Columbia and the Lower Fraser Valley, by Levelton associates for Environment Canada, B.C. Ministry of Environment, Lands and Parks and the Greater Vancouver Regional District, September 1996.

9. 1995 Provincial Emission Inventory Update Upstream and Downstream Oil and Gas Emission Estimation, by Clearstone Engineering and Levelton Associates for B.C. Ministry of Environment, Lands and Parks, January 12, 1998.

10. Biomass Consumption and Smoke Emissions from Contemporary and Prehistoric Wildland Fires in British Columbia, Canada-British Columbia Partnership Agreement on Forest Resources Development: FRDA II, March 1996.

11. British Columbia Inventory of Common Air Contaminants Emitted from Mobile Sources Outside the Lower Fraser Valley, prepared by James Fam for B.C. Ministry of Environment Lands and Parks, December 1996 - Revised February 1998.

12. Trends in Canada's Greenhouse Gas Emissions, 1990-1995, Environment Canada, A.P. Jaques, F. Neitzert and P. Boileau, April 1997.

13. Compilation of Air Pollutant Emission Factors, AP-42, United States Environmental Protection Agency.

14. Quarterly Report on Energy Supply-Demand in Canada, Statistics Canada, August, 1996.

15. Prince George Air Quality Management Background Report, Appendix D: Emission Inventory Assumptions and Factors, prepared by Dennis Fudge for the Prince George Airshed Technical Management Committee, October 1, 1996.

16. Road Dust Monitoring Study Vancouver, B.C., prepared for: NEIPTG Secretariat, by Seacor Environmental, October 9, 1997.

17. Road Dust Sampling Program for the B.C. Interior, prepared for: National Emission Inventory and Projections Task Group, by Levelton Engineering, May 30, 1997.

18. Road Dust Estimation Methodology Phase 1 Lower Fraser Valley, prepared for: Greater Vancouver Regional District, by Levelton Engineering, January 7, 1999.

19. Road Dust Estimation Methodology Phase 2 B.C. Outside the Lower Fraser Valley, prepared for: National Emissions and Projections Task Group, by Levelton Engineering, April 29, 1999.

FIGURE 1-1 British Columbia Study Area

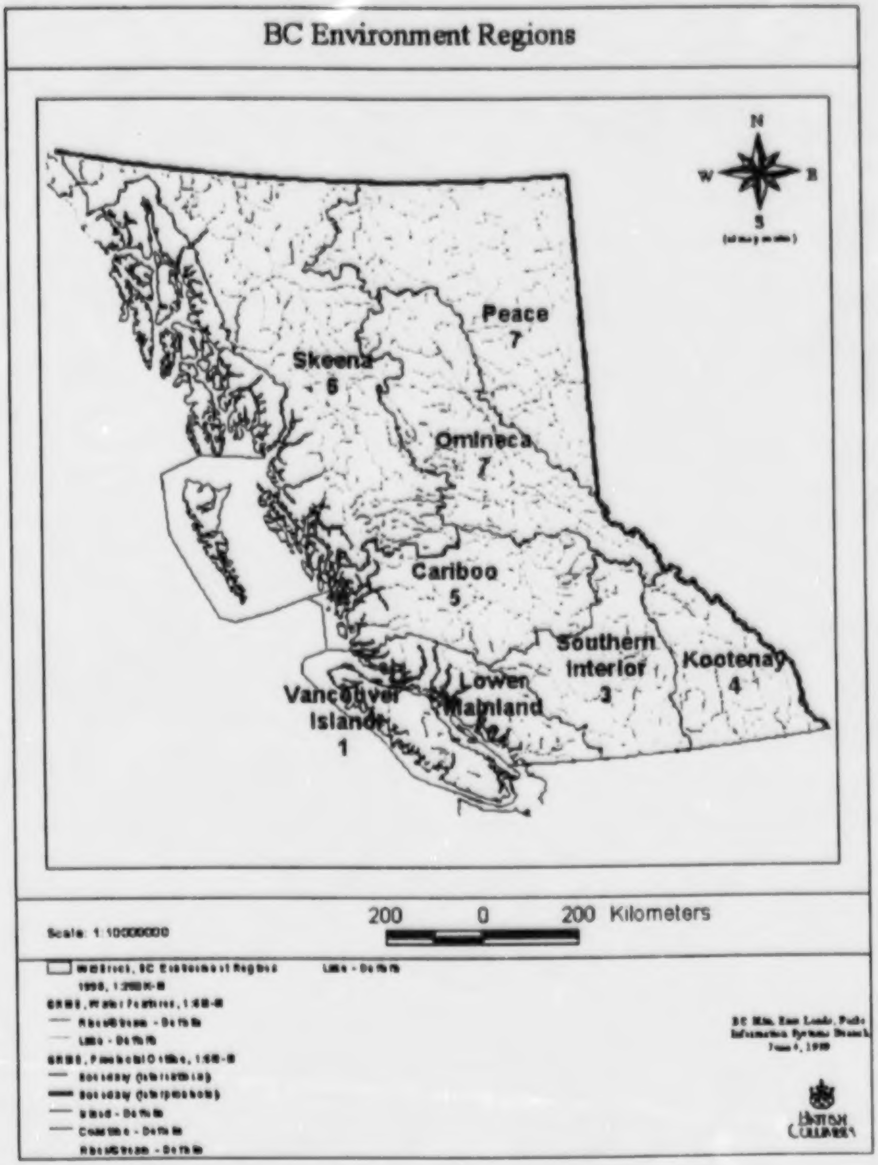

BC Environment Regions
N
W
E
S
Peace
7
Skeena
6
Omineca
7
Cariboo
5
Southern
Interior
3
Kootenay
4
Lower
Mainland
Vancouver
Island
1
Scale: 1:10000000
200
0
200 Kilometers
BRITISH
COLUMBIA

FIGURE 1-2 Lower Fraser Valley Study Area

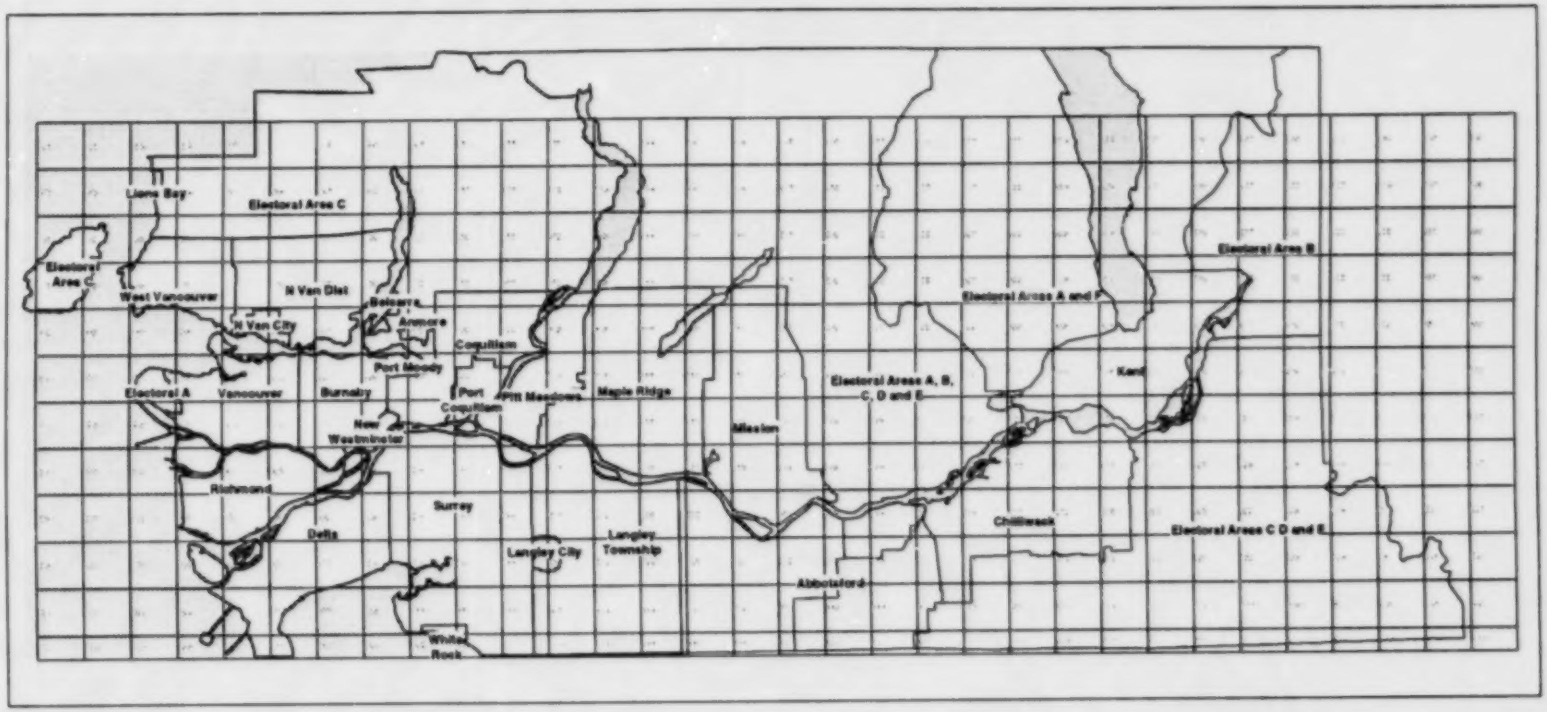
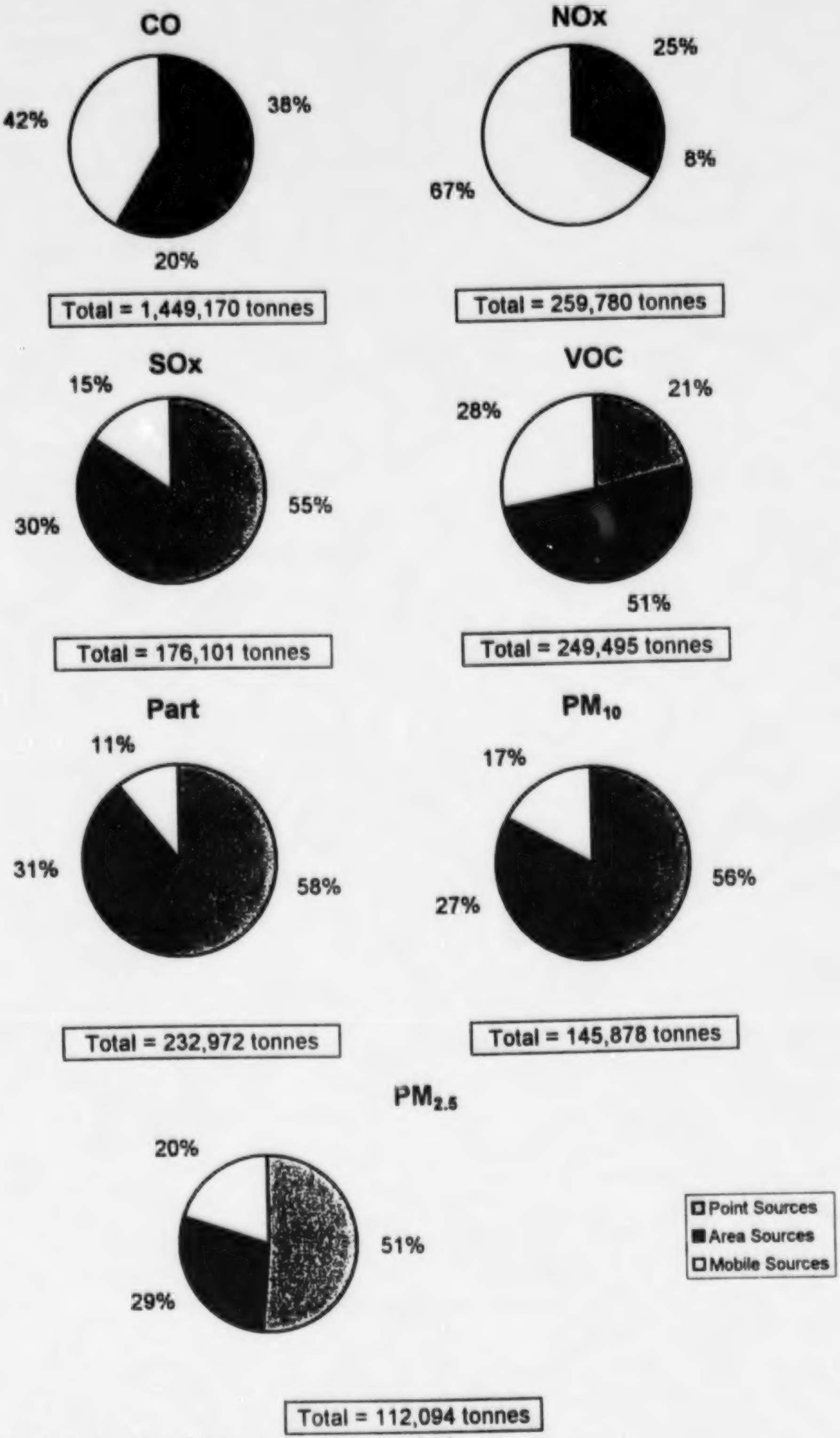

Lions Bay
Electoral Area C
Electoral Area C
West Vancouver
N Van Dist
Belcarra
Anmore
N Van City
Coquitlam
Port Moody
Electoral A
Vancouver
Burnaby
Port Coquitlam
Pitt Meadows
Maple Ridge
New Westminster
Richmond
Delta
Surrey
Langley City
Langley Township
White Rock
Mission
Electoral Areas A, B, C, D and E
Abbotsford
Electoral Areas A and F
Kent
Chilliwack
Electoral Area B
Electoral Areas C D and E

TABLE 2-1 B.C. 1995 Common Contaminant Emission Summary

Sector	CO		NOx		SOx		TRS		VOC		Part		PM10		PM2.5	
	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Point Sources	551,116	38	65,309	25	97,031	55	1,577	63	52,677	21	135,785	58	81,137	56	57,604	51
Area Sources	292,925	20	20,576	8	52,118	30	916	37	126,763	51	72,407	31	40,107	27	32,192	29
Mobile Sources	605,129	42	173,896	67	26,952	15			70,055	28	24,780	11	24,634	17	22,299	20
Anthopogenic Sub-Total	**1,449,170**	100	**259,780**	100	**176,101**	100	**2,493**	100	**249,495**	100	**232,972**	100	**145,878**	100	**112,094**	100
Natural Sources	**277,765**		**13,116**		**14**				**2,516,771**		**63,778**		**50,565**		**35,548**	
Road Dust											**671,643**		**158,486**		**31,441**	

Note: True zero values have been removed for clarity.
Values shown as 0 are between 0 and 0.5, and those shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions and percentages are subject to rounding errors, which may result in slight differences between totals.

FIGURE 2-1 B.C. 1995 Common Contaminant Emissions



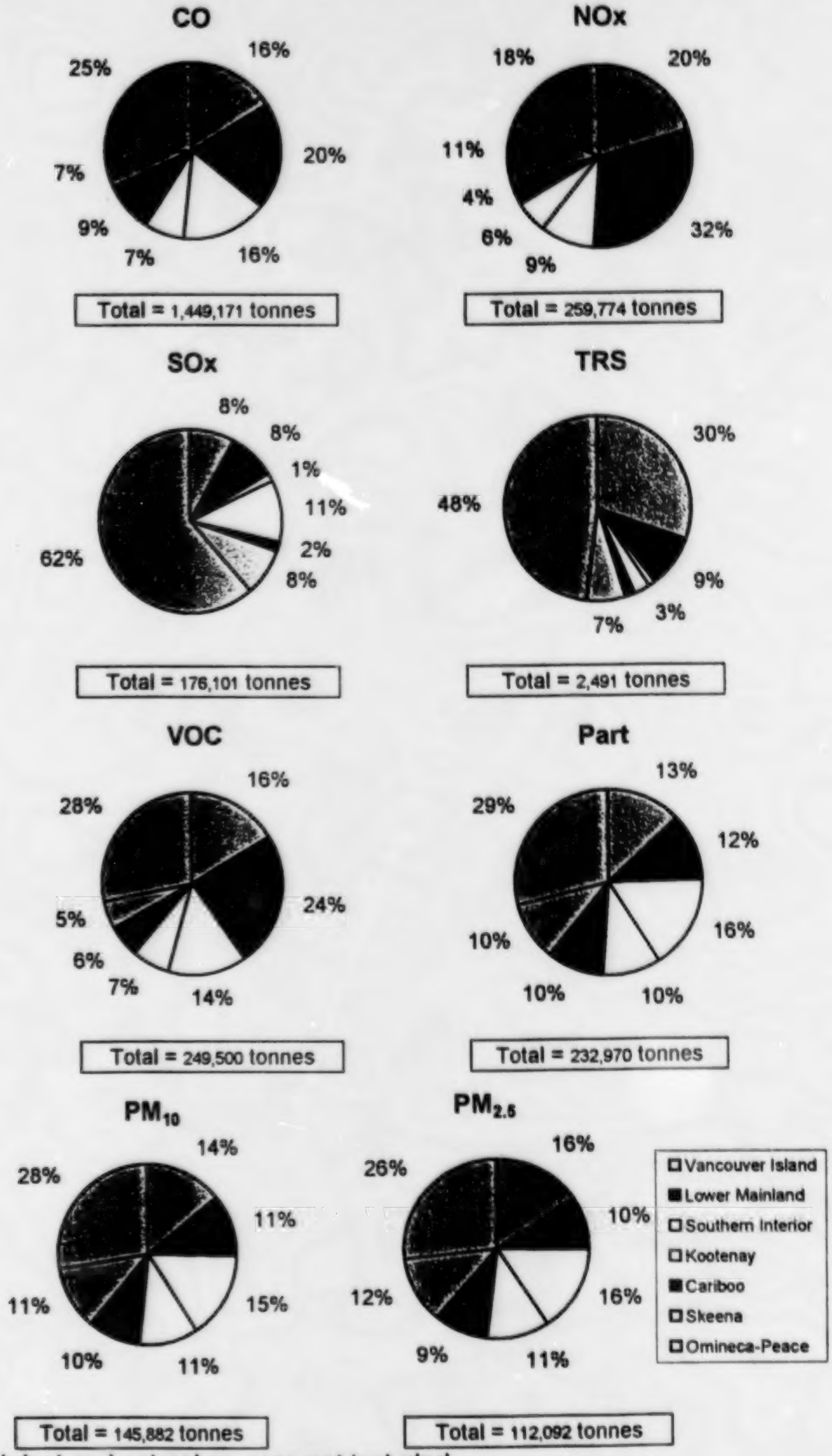
Road dust and natural sources not included.

TABLE 2-2 B.C. 1995 Common Contaminants by Waste Management Region

Region	CO		NOx		SOx		TRS		VOC		Part		PM10		PM2.5	
	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Vancouver Island	232,963	16.1	52,628	20.3	14,414	8.2	758	30.4	40,876	16.4	30,225	13.0	20,797	14.3	17,460	15.6
Lower Mainland	288,300	19.9	80,405	31.0	14,548	8.3	230	9.2	59,713	23.9	27,362	11.7	16,231	11.1	10,794	9.6
Southern Interior	228,002	15.7	23,945	9.2	2,432	1.4	30	1.2	35,587	14.3	38,172	16.4	22,549	15.5	17,521	15.6
Kootenay	107,816	7.4	15,721	6.1	18,956	10.8	70	2.8	17,019	6.8	23,017	9.9	15,732	10.8	12,432	11.1
Cariboo	131,544	9.1	11,024	4.2	2,813	1.6	38	1.5	13,739	5.5	22,942	9.8	13,957	9.6	10,586	9.4
Skeena	95,601	6.6	28,196	10.9	14,626	8.3	170	6.8	12,305	4.9	24,218	10.4	16,693	11.4	13,436	12.0
Omineca-Peace	364,945	25.2	47,857	18.4	108,312	61.5	1,195	48.0	70,262	28.2	67,033	28.8	39,924	27.4	29,863	26.6
Total:	1,449,171	100	259,774	100	176,101	100	2,491	100	249,500	100	232,970	100	145,882	100	112,092	100

Note: True zero values have been removed for clarity.
Values shown as 0 are between 0 and 0.5, and those shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions and percentages are subject to rounding errors, which may result in slight differences between totals.

FIGURE 2-2 B.C. 1995 Common Contaminants by Waste Management Region



Road dust and natural sources not included.

TABLE 4-1 B.C. 1995 Point Source Emissions by Industrial Category

Category	CO		NOx		SOx		TRS		VOC		Part		PM10		PM2.5	
	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Wood Products	401,465	72.8	6,810	10.4	544	0.6			35,464	67.3	79,716	58.7	42,475	52.3	28,578	49.6
Paper and Allied Products	102,790	18.7	18,132	27.8	14,624	15.1	1,444	91.6	5,562	10.6	26,854	19.8	20,534	25.3	16,051	27.9
Mining	1,885	0.3	9,540	14.6	5,323	5.5	2	0.1	1,666	3.2	5,664	4.2	3,301	4.1	1,597	2.8
Logging	23,204	4.2	212	0.3	17	0.0			2,034	3.9	4,786	3.5	4,520	5.6	4,432	7.7
Primary Metal Manufacturing	400	0.1	132	0.2	16,860	17.4			94	0.2	4,830	3.6	3,817	4.7	3,189	5.5
Refined Petroleum and Coal Products	5,761	1.0	2,414	3.7	8,473	8.7			1,258	2.4	2,375	1.7	675	0.8	286	0.5
Non-Metallic Mineral Products	226	0.0	6,504	10.0	1,415	1.5			85	0.2	2,220	1.6	1,144	1.4	565	1.0
Pipeline Transport	3,451	0.6	5,902	9.0	11	0.0	4	0.3	1,182	2.2	541	0.4	541	0.7	530	0.9
Power Generation & Other Utility	8,244	1.5	4,676	7.2	500	0.5			700	1.3	903	0.7	801	1.0	765	1.3
Crude Petroleum & Natural Gas Processing	1,906	0.3	8,934	13.7	48,642	50.1	126	8.0	2,306	4.4	206	0.2	203	0.3	162	0.3
Other	1,784	0.3	2,053	3.1	622	0.6	1	0.1	2,326	4.4	7,690	5.7	3,126	3.9	1,449	2.5
Total	**551,116**	**100**	**65,309**	**100**	**97,031**	**100**	**1,577**	**100**	**52,677**	**100**	**135,785**	**100**	**81,137**	**100**	**57,604**	**100**

Note: True zero values have been removed for clarity.
Values shown as 0 are between 0 and 0.5, and those shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions and percentages are subject to rounding errors, which may result in slight differences between totals.

FIGURE 4-1 1 B.C. 1995 Point Source Emissions by Industrial Category

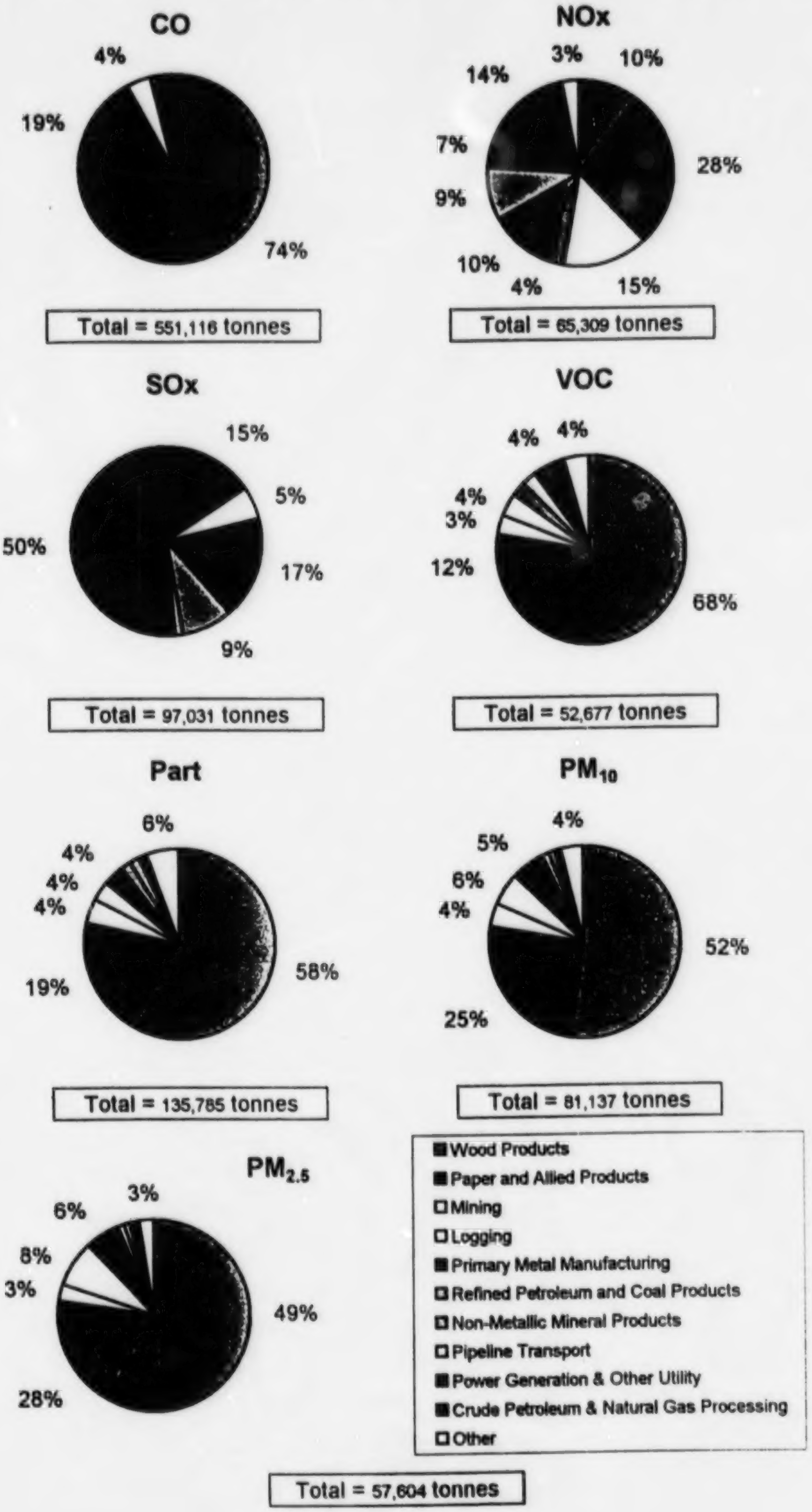


TABLE 5-1 B.C. Area Source Emissions by Category

Category	CO		NOx		SOx		TRS		VOC		Part		PM10		PM2.5	
	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Prescribed Burning	188,082	64.2	2,793	13.6	9	0.0			7,954	6.3	20,063	27.7	14,723	36.7	13,914	43.2
Space Heating	98,196	33.5	7,262	35.3	853	1.6			32,986	26.0	13,401	18.5	13,372	33.3	12,709	39.5
Agriculture			792	3.9					11,496	9.1	22,995	31.8	8,912	22.2	3,431	10.7
Oil and Gas	1,376	0.5	9,502	46.2	51,223	98.3	916	100.0	45,158	35.6	111	0.2	111	0.3	111	0.3
Solvent Evaporation									24,364	19.2						
Miscellaneous Burning	4,992	1.7	210	1.0	32	0.1			1,198	0.9	861	1.2	850	2.1	775	2.4
Other	279	0.1	17	0.1					3,608	2.8	14,976	20.7	2,139	5.3	1,251	3.9
Total	**292,925**	**100**	**20,576**	**100**	**52,118**	**100**	**916**	**100**	**126,763**	**100**	**72,407**	**100**	**40,107**	**100**	**32,192**	**100**

Note: True zero values have been removed for clarity.
Values shown as 0 are between 0 and 0.5, and those shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions and percentages are subject to rounding errors, which may result in slight differences between totals.

FIGURE 5-1 B.C. Area Source Emissions by Category

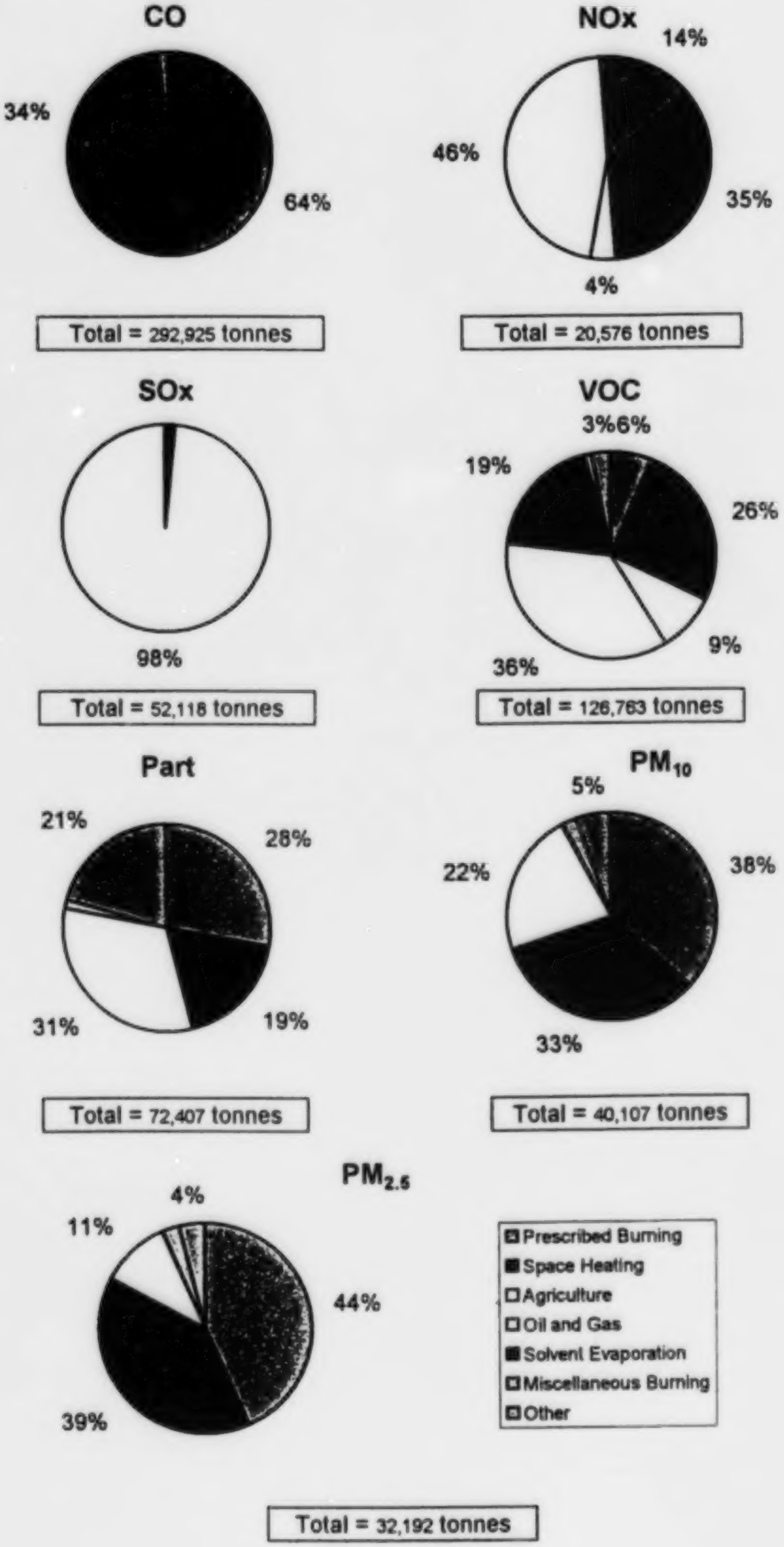
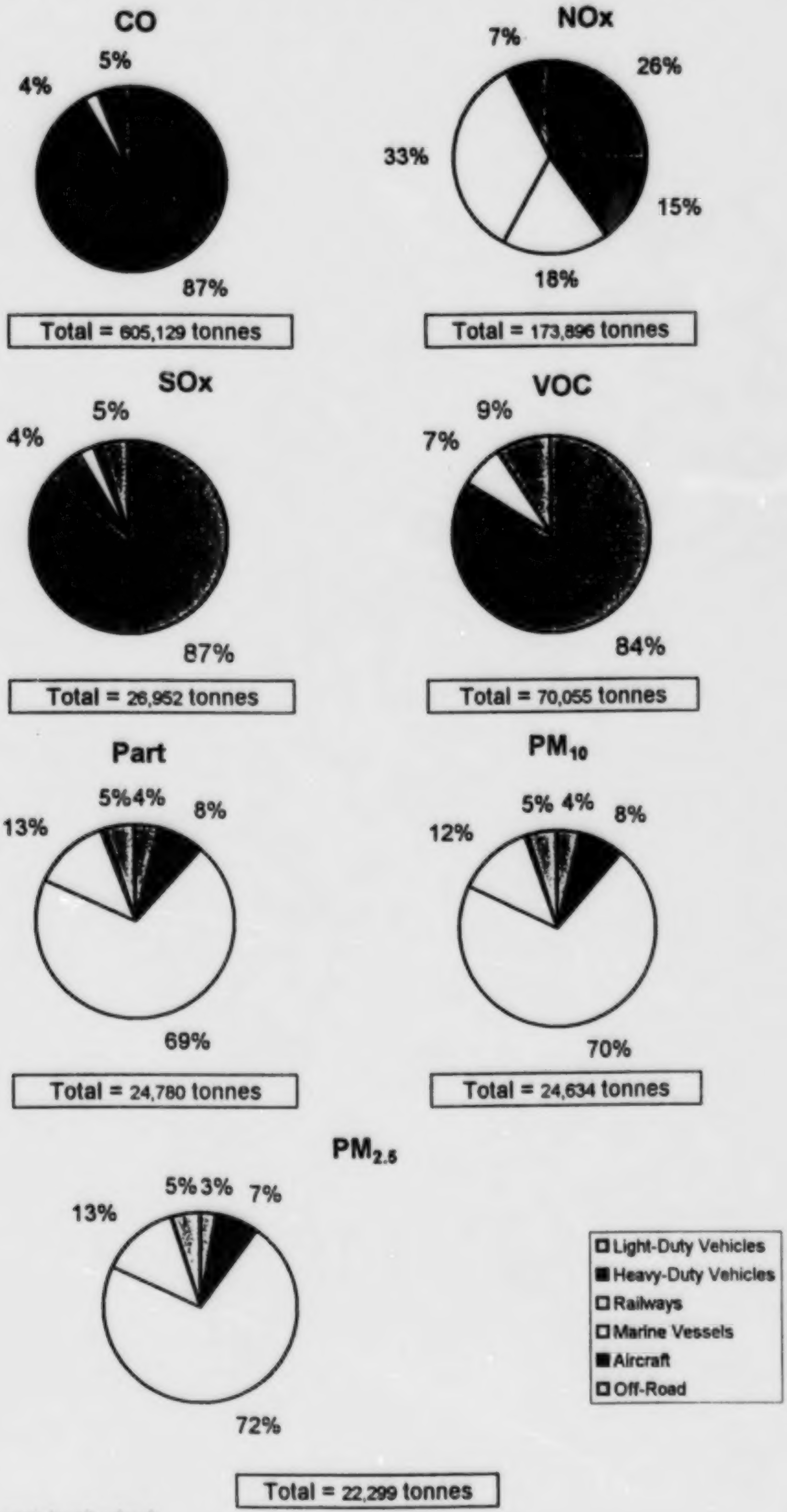


TABLE 6-1 B.C. Mobile Source Emissions by Category

Category	CO		NOx		SOx		VOC		Part		PM10		PM2.5	
	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Light-Duty Vehicles	524,572	86.7	44,644	25.7	1,724	6.4	54,974	78.5	972	3.9	939	3.8	593	2.7
Heavy-Duty Vehicles	25,034	4.1	25,516	14.7	439	1.6	3,984	5.7	1,885	7.6	1,861	7.6	1,666	7.5
Railways	5,743	0.9	30,920	17.8	2,171	8.1	1,633	2.3	17,438	70.4	17,438	70.8	16,043	71.9
Marine Vessels	13,983	2.3	59,965	34.5	22,327	82.8	5,646	8.1	3,107	12.5	3,107	12.6	2,858	12.8
Aircraft	8,527	1.4	1,156	0.7	66	0.2	951	1.4	240	1.0	134	0.5	94	0.4
Off-Road	27,270	4.5	11,694	6.7	225	0.8	2,868	4.1	1,138	4.6	1,135	4.6	1,045	4.7
Total	**605,129**	**100**	**173,896**	**100**	**26,952**	**100**	**70,055**	**100**	**24,780**	**100**	**24,634**	**100**	**22,299**	**100**

Note: True zero values have been removed for clarity.
Values shown as 0 are between 0 and 0.5, and those shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions and percentages are subject to rounding errors, which may result in slight differences between totals.

FIGURE 6-1 B.C. Mobile Source Emissions by Category



Road dust not included.

TABLE 7-1 B.C. Natural Source Emissions by Category

Category	CO		NOx		SOx		VOC		Part		PM10		PM2.5	
	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
Wildfires	277,765	100.0	4,125	31.5	14	100.0	11,746	0.5	46,752	73.3	35,752	70.7	33,002	92.8
Biogenics			8,991	68.5			2,503,460	99.5						
Wildlife							1,564	0.1						
Marine Aerosol									17,026	26.7	14,813	29.3	2,546	7.2
Total	277,765	100	13,116	100	14	100	2,516,771	100	63,778	100	50,565	100	35,548	100

Note: True zero values have been removed for clarity.
Values shown as 0 are between 0 and 0.5, and those shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions and percentages are subject to rounding errors, which may result in slight differences between totals.

TABLE 8-1 B.C. Summary of Greenhouse Gas Emissions (page 1 of 4)

SIC Group	Point Sources	kt CO2			kt CH4			kt N2O		
		B.C.	LFV	B.C. excl LFV	B.C.	LFV	B.C. excl LFV	B.C.	LFV	B.C. excl LFV
	Anthropogenic									
01	Agricultural Industries	34	34			0.000	0.0		0.000	0.0
04	Forestry & Logging	12		12		0.064	-0.1			
06	Mining	474		474	27.4		27.4			
07	Oil & Gas Production *	3,461		3,461	17.6		17.6	0.0		0.0
25, 27	Wood Industry and Paper & Allied Products	2,642	226	2,416	0.5	0.005	0.5	0.5	0.002	0.5
291	Iron and Steel	15		15						
35	Non-Metallic Mineral Products	1,075	831	244						
36	Refined Petroleum Products	774	408	365		0.010	0.0		0.004	0.0
37	Chemical Products	1,132	72	1,060		0.000	0.0		0.001	0.0
46	Oil & Gas Transmission *	1,165	37	1,128	0.3	0.098	0.2	0.0	0.000	0.0
49	MSW Incineration	167	91	77	0.0	0.010	0.0	0.0	0.002	0.0
n/a	Other	5,564	3,161	2,404	0.2	0.006	0.2	0.0	0.002	0.0
	Sub-total Anthropogenic	**16,516**	**4,861**	**11,656**	**46.0**	**0.194**	**45.9**	**0.6**	**0.012**	**0.6**
	Biomass - CO2									
25, 27	Wood Products and Paper & Allied Products	19,098	230	18,868						
	Total Permitted	**35,614**	**5,091**	**30,524**	**46.0**	**0.2**	**45.9**	**0.6**	**0.0**	**0.6**

Caution should be used when interpreting these numbers - see page 18. For tracking progress under GHG agreements use Environment Canada Trends report numbers instead of the ones presented here.

TABLE 8-1 B.C. Summary of Greenhouse Gas Emissions (continued, page 2 of 4)

Area Sources	kt CO2			kt CH4			kt N2O		
	B.C.	LFV	B.C. excl LFV	B.C.	LFV	B.C. excl LFV	B.C.	LFV	B.C. excl LFV
Anthropogenic									
Natural Gas Distribution				37.5		37.5			
Upstream Oil and Gas *	1,414		1,414	50.0		50.0	0.0		0.0
Construction	38		38						
Agriculture	111		111	57.7	13.812	43.9	3.1	0.701	2.4
Agriculture - Fertilizer Use							0.4	0.243	0.2
Agricultural Soils	34		34						
Residential	4,120	2,552	1,568	0.1	0.062	0.0	0.0	0.026	0.0
Public Administration	494		494						
Commercial	2,768	1,818	951	0.0	0.041	0.0	0.0	0.019	0.0
Anesthetics/Propellants							0.2		0.2
Biomass									
Residential					0.066	-0.1		0.004	0.0
Slash Burn				10.6	0.007	10.6	0.4	0.000	0.4
Agricultural Burning **				0.1		0.1	0.1		0.1
MSW Landfill				192.4	48.223	144.2			
Back yard burning ***					0.028	0.0		0.069	-0.1
Waste Water Treatment				2.5		2.5			
Sub-Total Area Sources Anthropogeni	**8,980**	**4,370**	**4,610**	**351.0**	**62.240**	**288.7**	**4.2**	**1.064**	**3.2**

Caution should be used when interpreting these numbers - see page 18. For tracking progress under GHG agreements use Environment Canada Trends report numbers instead of the ones presented here.

TABLE 8-1 B.C. Summary of Greenhouse Gas Emissions (continued, page 3 of 4)

Area Sources - (continued from Page 1)	kt CO2			kt CH4			kt N2O		
	B.C.	LFV	B.C. excl LFV	B.C.	LFV	B.C. excl LFV	B.C.	LFV	B.C. excl LFV
Biomass - CO2									
Residential	4,379	42	4,337						
Slash Burn	3,606	2	3,604						
Agricultural Burning **	780		780						
MSW Landfill	687	132	555						
Back yard burning ***	62	7	56						
Waste Water Treatment	52		52						
Sub-Total Biomass - CO2 Area Source	**9,567**	**182**	**9,384**						
Mobile Sources									
Gasoline									
Autos	5,889	2,526	3,363	0.9	0.396	0.5	3.0	1.296	1.7
L-D Trucks	3,094	1,344	1,750	0.5	0.238	0.3	1.7	0.737	1.0
H-D Trucks	237	50	187	0.0	0.011	0.0	0.1	0.013	0.1
Motorcycles	33	14	19	0.0	0.020	0.0	0.0	0.001	0.0
Diesel									
Autos	105	45	60		0.001	0.0	0.0	0.007	0.0
LDD Vehicles	146	63	83		0.002	0.0	0.0	0.009	0.0
HDD Vehicles	3,003	669	2,334	0.2	0.049	0.2	0.4	0.098	0.3
Natural Gas Vehicles	182		182						
Propane Vehicles	476		476						
Railroad	1,497	211	1,286	0.1	0.020	0.1	0.2	0.031	0.2
Marine	2,227	308	1,919	0.1	0.023	0.1	0.3	0.048	0.3
Aircraft	2,352	288	2,064	0.1	0.009	0.1	0.2	0.028	0.2
Off-Road Gas	586	32	554	0.0	0.012	0.0	0.1	0.002	0.1
Other Diesel	2,321	224	2,096	0.2	0.024	0.2	0.4	0.026	0.3
Sub-Total Mobile Source	**22,147**	**5,773**	**16,374**	**2.4**	**0.805**	**1.6**	**6.4**	**2.296**	**4.1**
Total Area/Mobile Anthropogeni	**31,126**	**10,143**	**20,983**	**353.4**	**63.045**	**290.3**	**10.7**	**3.360**	**7.3**
Total Area/Mobile	**40,693**	**10,325**	**30,368**	**353.4**	**63.045**	**290.3**	**10.7**	**3.360**	**7.3**

Caution should be used when interpreting these numbers - see page 18. For tracking progress under GHG agreements use Environment Canada Trends report numbers instead of the ones presented here.

TABLE 8-1 B.C. Summary of Greenhouse Gas Emissions (continued, page 4 of 4)

Totals									
Anthropogenic	47,642	15,004	32,639	399.4	63.239	336.2	11.3	3.372	7.9
Biomass - CO2	28,665	413	28,252						
Overall	76,307	15,416	60,891	399.4	63.239	336.2	11.3	3.372	7.9

Note: With the noted exceptions, data for this table is identical to the Environment Canada "Trends in Canada's Greenhouse Gas Emissions 1990-1995" report.

All LFV data is from the Greater Vancouver Regional District 1995 Emission Inventory for the Lower Fraser Valley Airshed.

* Oil & gas production, oil & gas transmission, and upstream oil and gas estimates are from "1995 Provincial Emission Inventory Update - Upstream and Downstream Oil and Gas Emission Estimation", Clearstone Engineering and B.H. Levelton and Associates, January 12, 1998.

** Agricultural burning estimates from "1995 Emission Inventory of Agricultural Sources in British Columbia and the Lower Fraser Valley", B.H. Levelton and Associates, September 1996.

*** From 1995 BC Environment and GVRD common contaminant inventories.

SIC groupings 35 and 29 are not absolute representations because some of the data is held confidential by Statistics Canada.

LFV estimates are broken down into more detail than EC estimates. Therefore, there are some cases where an LFV estimate is listed without a corresponding estimate for B.C.

Some CH4 and N2O estimates differ slightly from the Environment Canada trends report as the ratio of total GHGs over CO2 equivalent was used to add resolution.

Forest fires (wildfires) and structural fires for the LFV are not included as they are not likely to be used as the basis for setting GHG reduction targets.

Caution should be used when interpreting these numbers - see page 18. For tracking progress under GHG agreements use Environment Canada Trends report numbers instead of the ones presented here.

APPENDIX A

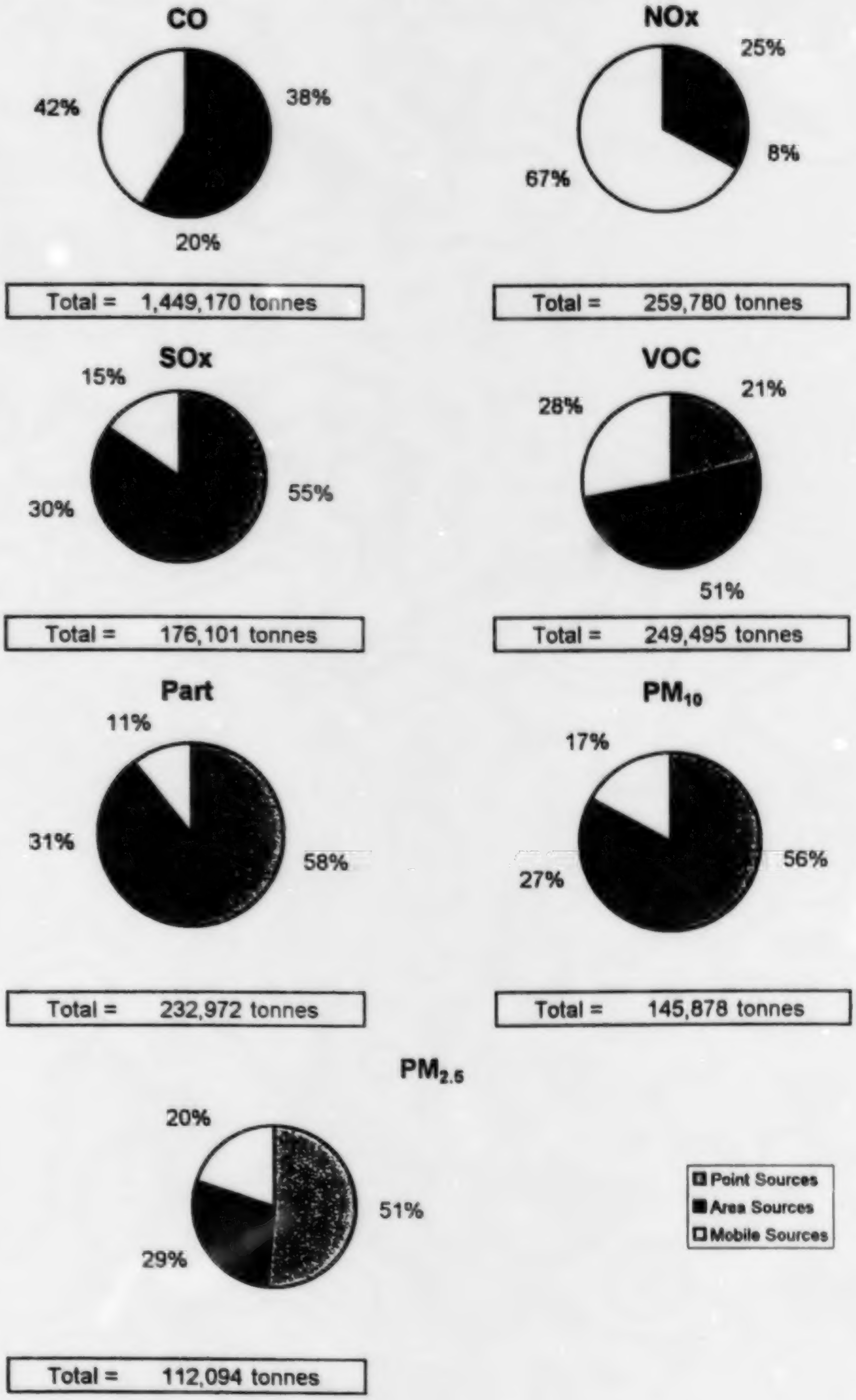
Waste Management Region Summaries

BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS

SOURCE / Category	CO			NOx			SOx			TRS			VOC			Part			PM10			PM2.5		
	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total
ANTHROPOGENIC																								
Point Sources	551,116	38.0	31.9	65,309	25.1	23.9	97,031	55.1	55.1	1,577	63.3	63.3	52,677	21.1	1.9	135,785	58.3	45.8	81,137	55.6	41.3	57,604	51.4	39.0
Wood Products	401,465	27.7	23.2	6,810	2.6	2.5	544	0.3	0.3				35,464	14.2	1.3	79,716	34.2	26.9	42,475	29.1	21.6	28,578	25.5	19.4
Paper and Allied Products	102,790	7.1	6.0	18,132	7.0	6.6	14,624	8.3	8.3	1,444	57.9	57.9	5,562	2.2	0.2	26,854	11.5	9.0	20,534	14.1	10.5	16,051	14.3	10.9
Mining	1,885	0.1	0.1	9,540	3.7	3.5	5,323	3.0	3.0	2	0.1	0.1	1,666	0.7	0.1	5,664	2.4	1.9	3,301	2.3	1.7	1,597	1.4	1.1
Logging	23,204	1.6	1.3	212	0.1	0.1	17	0.0	0.0				2,034	0.8	0.1	4,786	2.1	1.6	4,520	3.1	2.3	4,432	4.0	3.0
Primary Metal Manufacturing	400	0.0	0.0	132	0.1	0.0	16,860	9.6	9.6				94	0.0	0.0	4,830	2.1	1.6	3,817	2.6	1.9	3,189	2.8	2.2
Refined Petroleum and Coal Products	5,761	0.4	0.3	2,414	0.9	0.9	8,473	4.8	4.8				1,258	0.5	0.0	2,375	1.0	0.8	675	0.5	0.3	286	0.3	0.2
Non-Metallic Mineral Products	228	0.0	0.0	6,504	2.5	2.4	1,415	0.8	0.8				85	0.0	0.0	2,220	1.0	0.7	1,144	0.8	0.6	565	0.5	0.4
Pipeline Transport	3,451	0.2	0.2	5,902	2.3	2.2	11	0.0	0.0	4	0.2	0.2	1,182	0.5	0.0	541	0.2	0.2	541	0.4	0.3	530	0.5	0.4
Power Generation & Other Utility	8,244	0.6	0.5	4,676	1.8	1.7	500	0.3	0.3				700	0.3	0.0	903	0.4	0.3	801	0.5	0.4	765	0.7	0.5
Crude Petroleum & Natural Gas Processing	1,906	0.1	0.1	8,934	3.4	3.3	48,642	27.6	27.6	126	5.1	5.1	2,306	0.9	0.1	206	0.1	0.1	203	0.1	0.1	162	0.1	0.1
Other	1,784	0.1	0.1	2,053	0.8	0.8	622	0.4	0.4	1	0.0	0.0	2,326	0.9	0.1	7,690	3.3	2.6	3,126	2.1	1.6	1,449	1.3	1.0
Area Sources	292,925	20.2	17.0	20,576	7.9	7.5	52,118	29.6	29.6	916	36.7	36.7	126,763	50.8	4.6	72,407	31.1	24.4	40,107	27.5	20.4	32,192	28.7	21.8
Prescribed Burning	188,082	13.0	10.9	2,793	1.1	1.0	9	0.0	0.0				7,954	3.2	0.3	20,063	8.6	6.8	14,723	10.1	7.5	13,914	12.4	9.4
Space Heating	98,196	6.8	5.7	7,262	2.8	2.7	853	0.5	0.5				32,986	13.2	1.2	13,401	5.8	4.5	13,372	9.2	6.8	12,709	11.3	8.6
Agriculture				792	0.3	0.3							11,496	4.6	0.4	22,995	9.9	7.7	8,912	6.1	4.5	3,431	3.1	2.3
Oil and Gas	1,376	0.1	0.1	9,502	3.7	3.5	51,223	29.1	29.1	916	36.7	36.7	45,158	18.1	1.6	111	0.0	0.0	111	0.1	0.1	111	0.1	0.1
Solvent Evaporation													24,364	9.8	0.9									
Miscellaneous Burning	4,992	0.3	0.3	210	0.1	0.1	32	0.0	0.0				1,198	0.5	0.0	861	0.4	0.3	850	0.6	0.4	775	0.7	0.5
Other	279	0.0	0.0	17	0.0	0.0							3,608	1.4	0.1	14,976	6.4	5.0	2,139	1.5	1.1	1,251	1.1	0.8
Mobile Sources	605,129	41.8	35.0	173,896	66.9	63.7	26,952	15.3	15.3				70,055	28.1	2.5	24,780	10.6	8.4	24,634	16.9	12.5	22,299	19.9	15.1
Light-Duty Vehicles	524,572	36.2	30.4	44,644	17.2	16.4	1,724	1.0	1.0				54,974	22.0	2.0	972	0.4	0.3	939	0.6	0.5	583	0.5	0.4
Heavy-Duty Vehicles	25,034	1.7	1.4	25,516	9.8	9.4	439	0.2	0.2				3,984	1.6	0.1	1,885	0.8	0.6	1,881	1.3	1.0	1,666	1.5	1.1
Railways	5,743	0.4	0.3	30,920	11.9	11.3	2,171	1.2	1.2				1,633	0.7	0.1	17,438	7.5	5.9	17,438	12.0	8.9	16,043	14.3	10.9
Marine Vessels	13,983	1.0	0.8	59,965	23.1	22.0	22,327	12.7	12.7				5,646	2.3	0.2	3,107	1.3	1.0	3,107	2.1	1.6	2,858	2.5	1.9
Aircraft	8,527	0.6	0.5	1,156	0.4	0.4	68	0.0	0.0				951	0.4	0.0	240	0.1	0.1	134	0.1	0.1	94	0.1	0.1
Off-Road	27,270	1.9	1.6	11,694	4.5	4.3	225	0.1	0.1				2,868	1.1	0.1	1,138	0.5	0.4	1,135	0.8	0.6	1,045	0.9	0.7
ANTHROPOGENIC SUB-TOTAL	1,449,170	100.0	83.9	259,780	100.0	95.2	176,101	100.0	100.0	2,493	100.0	100.0	249,495	100.0	9.0	232,972	100.0	78.5	145,878	100.0	74.3	112,094	100.0	75.9
NATURAL																								
Wildfires	277,765	100.0	16.1	4,125	31.5	1.5	14	100.0	0.0				11,746	0.5	0.4	46,752	73.3	15.8	35,752	70.7	18.2	33,002	92.8	22.4
Biogenics				8,991	68.5	3.3							2,503,460	99.5	90.5									
Wildlife													1,564	0.1	0.1									
Marine Aerosol																17,026	26.7	5.7	14,813	29.3	7.5	2,546	7.2	1.7
NATURAL SUB-TOTAL	277,765	100.0	16.1	13,116	100.0	4.8	14	100.0	0.0				2,516,771	100.0	91.0	63,778	100.0	21.5	50,565	100.0	25.7	35,548	100.0	24.1
TOTAL	1,726,935		100.0	272,896		100.0	176,114		100.0	2,493		100.0	2,766,266		100.0	296,750		100.0	196,443		100.0	147,642		100.0

ROAD DUST	Part	PM10	PM2.5
Paved	454,108	87,039	20,812
Unpaved	217,535	71,447	10,629

B.C. 1995 Emission Inventory



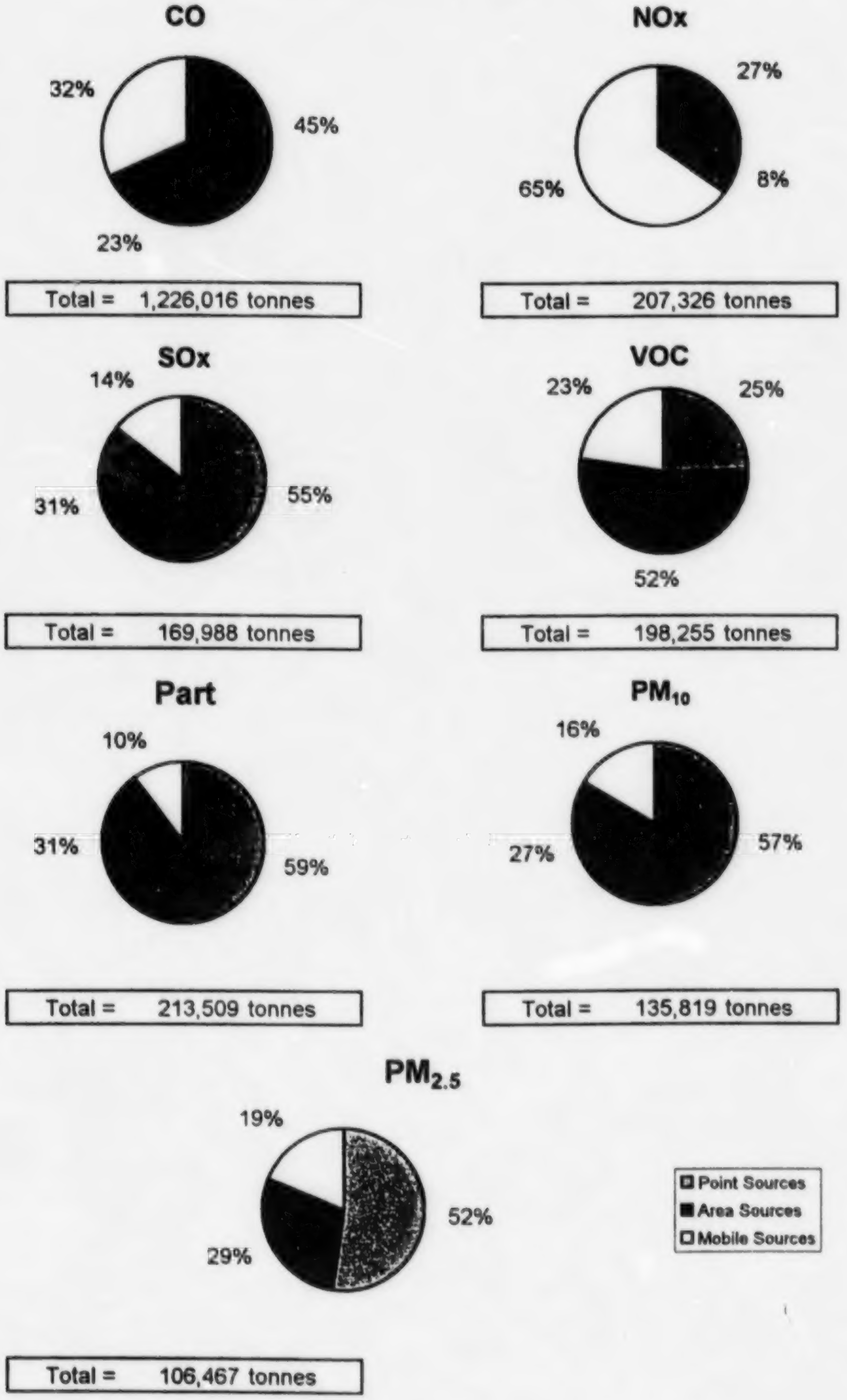
Road dust and natural sources not included.

BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS - EXCLUDING LOWER FRASER VALLEY

SOURCE / Category	CO (tonnes)	CO % of Sub-Total	CO % of Overall Total	NOx (tonnes)	NOx % of Sub-Total	NOx % of Overall Total	SOx (tonnes)	SOx % of Sub-Total	SOx % of Overall Total	TRS (tonnes)	TRS % of Sub-Total	TRS % of Overall Total	VOC (tonnes)	VOC % of Sub-Total	VOC % of Overall Total	Part (tonnes)	Part % of Sub-Total	Part % of Overall Total	PM10 (tonnes)	PM10 % of Sub-Total	PM10 % of Overall Total	PM2.5 (tonnes)	PM2.5 % of Sub-Total	PM2.5 % of Overall Total
ANTHROPOGENIC																								
Point Sources	546,825	44.8	36.4	56,124	27.1	25.5	93,696	55.1	55.1	1,577	63.3	63.3	49,095	24.8	1.8	125,299	58.7	45.3	78,918	58.6	41.4	55,607	52.2	39.2
Wood Products	400,283	32.6	26.6	6,571	3.2	3.0	530	0.3	0.3				34,836	17.6	1.3	76,847	36.0	27.8	41,398	30.5	22.3	28,049	26.3	19.8
Paper and Allied Products	102,521	8.4	6.8	17,945	8.7	8.1	14,617	8.6	8.6	1,444	57.9	57.9	5,531	2.8	0.2	26,286	12.3	9.5	20,488	15.1	11.0	16,008	15.0	11.3
Mining	1,885	0.2	0.1	9,540	4.6	4.3	5,323	3.1	3.1	2	0.1	0.1	1,666	0.8	0.1	5,664	2.7	2.0	3,301	2.4	1.8	1,597	1.5	1.1
Logging	21,615	1.8	1.4	187	0.1	0.1	17	0.0	0.0				1,830	0.9	0.1	4,604	2.2	1.7	4,339	3.2	2.3	4,251	4.0	3.0
Primary Metal Manufacturing	59	0.0	0.0	113	0.1	0.1	16,827	9.9	9.9				7	0.0	0.0	4,575	2.1	1.7	3,670	2.7	2.0	3,075	2.9	2.2
Refined Petroleum and Coal Products	5,577	0.5	0.4	1,729	0.8	0.8	6,061	3.6	3.6				421	0.2	0.0	1,891	0.9	0.7	431	0.3	0.2	149	0.1	0.1
Non-Metallic Mineral Products	47	0.0	0.0	1,260	0.6	0.6	760	0.4	0.4				58	0.0	0.0	975	0.5	0.4	437	0.3	0.2	273	0.3	0.2
Pipeline Transport	3,385	0.3	0.2	5,770	2.8	2.6	11	0.0	0.0	4	0.2	0.2	1,177	0.6	0.0	536	0.3	0.2	536	0.4	0.3	525	0.5	0.4
Power Generation & Other Utility	7,795	0.6	0.5	2,804	1.4	1.3	338	0.2	0.2				667	0.3	0.0	801	0.4	0.3	706	0.5	0.4	671	0.6	0.5
Crude Petroleum & Natural Gas Processing	1,906	0.2	0.1	8,934	4.3	4.1	48,642	28.6	28.6	126	5.1	5.1	2,306	1.2	0.1	206	0.1	0.1	203	0.1	0.1	182	0.2	0.1
Other	1,552	0.1	0.1	1,291	0.6	0.6	571	0.3	0.3	1	0.0	0.0	596	0.3	0.0	2,914	1.4	1.1	1,412	1.0	0.8	847	0.8	0.6
Area Sources	287,922	23.5	19.2	16,544	8.0	7.5	51,916	30.5	30.5	916	36.7	36.7	104,489	52.7	3.9	66,002	30.9	23.8	36,789	27.1	19.8	30,718	28.9	21.6
Prescribed burning	187,965	15.3	12.5	2,792	1.3	1.3	9	0.0	0.0				7,949	4.0	0.3	20,056	9.4	7.2	14,718	10.8	7.9	13,910	13.1	9.8
Space Heating	93,833	7.7	6.2	3,642	1.8	1.7	654	0.4	0.4				32,141	16.2	1.2	12,544	5.9	4.5	12,519	9.2	6.7	11,887	11.2	8.4
Agriculture				404	0.2	0.2							8,296	4.2	0.3	18,647	8.7	6.7	7,072	5.2	3.8	3,339	3.1	2.4
Oil and Gas	1,376	0.1	0.1	9,502	4.6	4.3	51,223	30.1	30.1	916	36.7	36.7	41,082	20.7	1.5	111	0.1	0.0	111	0.1	0.1	111	0.1	0.1
Solvent Evaporation													11,141	5.6	0.4									
Miscellaneous Burning	4,628	0.4	0.3	192	0.1	0.1	30	0.0	0.0				1,118	0.6	0.0	814	0.4	0.3	804	0.6	0.4	730	0.7	0.5
Other	120	0.0	0.0	12	0.0	0.0							2,762	1.4	0.1	13,830	6.5	5.0	1,545	1.1	0.8	741	0.7	0.5
Mobile Sources	391,469	31.9	26.0	134,858	65.0	61.1	24,377	14.3	14.3				44,671	22.5	1.7	22,208	10.4	8.0	22,131	16.3	11.9	20,142	18.9	14.2
Light-Duty Vehicles	334,044	27.2	22.2	25,493	12.3	11.6	982	0.6	0.6				33,949	17.1	1.3	553	0.3	0.2	532	0.4	0.3	334	0.3	0.2
Heavy-Duty Vehicles	19,383	1.6	1.3	19,402	9.4	8.8	342	0.2	0.2				3,118	1.6	0.1	1,465	0.7	0.5	1,462	1.1	0.8	1,295	1.2	0.9
Railways	4,928	0.4	0.3	26,527	12.8	12.0	1,859	1.1	1.1				1,401	0.7	0.1	16,382	7.7	5.9	16,382	12.1	8.8	15,072	14.2	10.6
Marine Vessels	9,169	0.7	0.6	54,921	26.5	24.9	21,027	12.4	12.4				3,885	2.0	0.1	2,859	1.3	1.0	2,859	2.1	1.5	2,630	2.5	1.9
Aircraft	3,682	0.3	0.2	156	0.1	0.1	17	0.0	0.0				343	0.2	0.0	115	0.1	0.0	64	0.0	0.0	45	0.0	0.0
Off-Road	20,263	1.7	1.3	8,159	3.9	3.7	150	0.1	0.1				1,975	1.0	0.1	834	0.4	0.3	832	0.6	0.4	788	0.7	0.5
ANTHROPOGENIC SUB-TOTAL	1,226,016	100.0	81.5	207,326	100.0	94.1	169,988	100.0	100.0	2,493	100.0	100.0	198,255	100.0	7.4	213,509	100.0	77.1	135,819	100.0	73.0	106,467	100.0	75.0
NATURAL																								
Wildfires	277,474	100.0	18.5	4,121	31.8	1.9	14	100.0	0.0				11,734	0.5	0.4	46,704	73.8	16.9	35,715	71.2	19.2	32,967	93.0	23.2
Biogenics				8,838	68.2	4.0							2,484,628	99.5	92.2									
Wildlife													1,560	0.1	0.1									
Marine Aerosol																16,598	26.2	6.0	14,441	28.8	7.8	2,490	7.0	1.8
NATURAL SUB-TOTAL	277,474	100.0	18.5	12,959	100.0	5.9	14	100.0	0.0				2,497,922	100.0	92.6	63,302	100.0	22.9	50,156	100.0	27.0	35,457	100.0	25.0
TOTAL	1,503,491		100.0	220,284		100.0	170,002		100.0	2,493		100.0	2,696,177		100.0	276,811		100.0	185,974		100.0	141,924		100.0

ROAD DUST	Part (tonnes)	PM10 (tonnes)	PM2.5 (tonnes)
Paved	404,791	77,586	18,552
Unpaved	217,535	71,447	10,629

B.C. 1995 Emission Inventory - excluding LFV

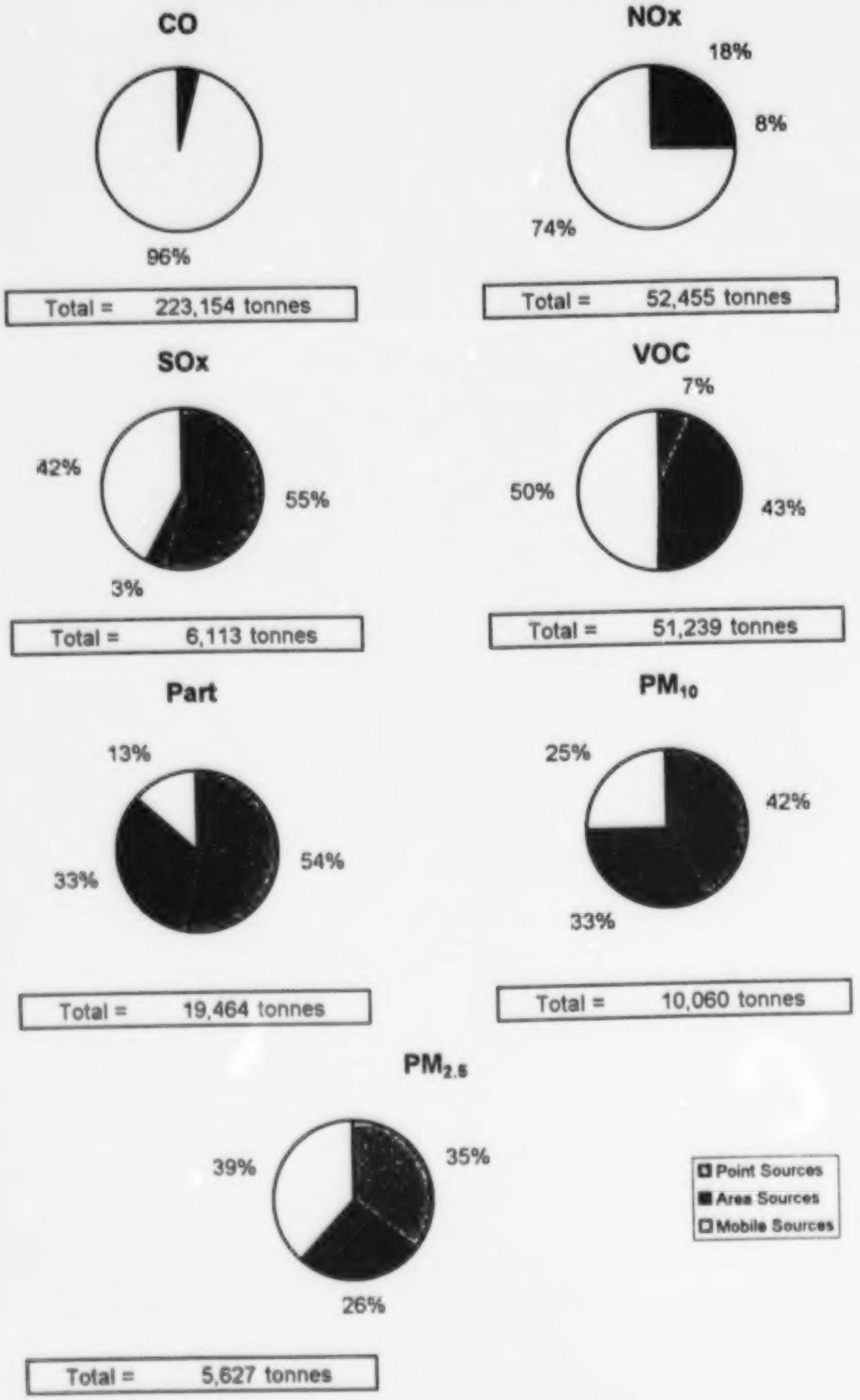


Road dust and natural sources not included.

LOWER FRASER VALLEY 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS

SOURCE / Category	CO			NOx			SOx			TRS			VOC			Part			PM10			PM2.5		
	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total
ANTHROPOGENIC																								
Point Sources	4,491	2.0	2.0	9,185	17.5	17.5	3,337	54.6	54.6				3,581	7.0	5.1	10,488	53.9	52.6	4,219	41.9	40.3	1,997	35.5	34.9
Wood Products	1,182	0.5	0.5	239	0.5	0.5	14	0.2	0.2				627	1.2	0.9	2,870	14.7	14.4	1,077	10.7	10.3	529	9.4	9.3
Paper and Allied Products	269	0.1	0.1	187	0.4	0.4	7	0.1	0.1				31	0.1	0.0	568	2.9	2.8	48	0.5	0.5	43	0.8	0.8
Logging	1,589	0.7	0.7	45	0.1	0.1							204	0.4	0.3	182	0.9	0.9	182	1.8	1.7	182	3.2	3.2
Primary Metal Manufacturing	341	0.2	0.2	19	0.0	0.0	33	0.5	0.5				87	0.2	0.1	255	1.3	1.3	147	1.5	1.4	114	2.0	2.0
Refined Petroleum and Coal Products	184	0.1	0.1	685	1.3	1.3	2,412	39.5	39.5				837	1.6	1.2	484	2.5	2.4	244	2.4	2.3	136	2.4	2.4
Non-Metallic Mineral Products	179	0.1	0.1	5,244	10.0	10.0	655	10.7	10.7				27	0.1	0.0	1,245	6.4	6.2	707	7.0	6.8	291	5.2	5.1
Pipeline Transport	66	0.0	0.0	132	0.3	0.3	1	0.0	0.0				5	0.0	0.0	5	0.0	0.0	5	0.0	0.0	5	0.1	0.1
Power Generation & Other Utility	449	0.2	0.2	1,872	3.6	3.6	164	2.7	2.7				33	0.1	0.0	103	0.5	0.5	95	0.9	0.9	94	1.7	1.6
Other	232	0.1	0.1	762	1.5	1.4	51	0.8	0.8				1,730	3.4	2.5	4,776	24.5	24.0	1,714	17.0	16.4	603	10.7	10.5
Area Sources	5,003	2.2	2.2	4,032	7.7	7.7	201	3.3	3.3				22,274	43.5	31.8	6,404	32.9	32.1	3,338	33.2	31.9	1,474	26.2	25.8
Prescribed Burning	117	0.1	0.1	2	0.0	0.0	0	0.0	0.0				5	0.0	0.0	7	0.0	0.0	5	0.0	0.0	5	0.1	0.1
Space Heating	4,363	2.0	2.0	3,620	6.9	6.9	199	3.3	3.3				845	1.6	1.2	857	4.4	4.3	853	8.5	8.1	822	14.6	14.4
Agriculture				388	0.7	0.7							3,200	6.2	4.6	4,348	22.3	21.8	1,840	18.3	17.6	92	1.6	1.6
Oil and Gas													4,076	8.0	5.8									
Solvent Evaporation													13,223	25.8	18.9									
Miscellaneous Burning	364	0.2	0.2	18	0.0	0.0	2	0.0	0.0				80	0.2	0.1	47	0.2	0.2	46	0.5	0.4	45	0.8	0.8
Other	159			5									846			1,146			594			510		
Mobile Sources	213,660	95.7	95.6	39,238	74.8	74.6	2,575	42.1	42.1				25,384	49.5	36.2	2,572	13.2	12.9	2,503	24.9	23.9	2,157	38.3	37.7
Light-Duty Vehicles	190,528	85.4	85.3	19,151	36.5	36.4	742	12.1	12.1				21,025	41.0	30.0	419	2.2	2.1	407	4.0	3.9	259	4.6	4.5
Heavy-Duty Vehicles	5,651	2.5	2.5	6,114	11.7	11.6	97	1.6	1.6				866	1.7	1.2	420	2.2	2.1	419	4.2	4.0	371	6.6	6.5
Railways	815	0.4	0.4	4,393	8.4	8.3	312	5.1	5.1				232	0.5	0.3	1,056	5.4	5.3	1,056	10.5	10.1	971	17.3	17.0
Marine Vessels	4,814	2.2	2.2	5,044	9.6	9.6	1,300	21.3	21.3				1,761	3.4	2.5	248	1.3	1.2	248	2.5	2.4	228	4.1	4.0
Aircraft	4,845	2.2	2.2	1,000	1.9	1.9	49	0.8	0.8				608	1.2	0.9	125	0.6	0.6	70	0.7	0.7	49	0.9	0.9
Off-Road	7,007	3.1	3.1	3,535	6.7	6.7	75	1.2	1.2				893	1.7	1.3	304	1.6	1.5	303	3.0	2.9	279	5.0	4.9
ANTHROPOGENIC SUB-TOTAL	223,154	100.0	99.9	52,455	100.0	99.7	6,113	100.0	100.0				51,239	100.0	73.1	19,464	100.0	97.6	10,060	100.0	96.1	5,627	100.0	98.4
NATURAL																								
Wildfires	291	100.0	0.1	4	2.8	0.0	0	100.0	0.0				12	0.1	0.0	49	10.3	0.2	37	9.1	0.4	35	38.2	0.6
Biogenics				153	97.2	0.3							18,832	99.9	26.9									
Wildlife													4	0.0	0.0									
Marine Aerosol																428	89.7	2.1	372	90.9	3.6	56	61.8	1.0
NATURAL SUB-TOTAL	291	100.0	0.1	157	100.0	0.3	0	100.0	0.0				18,849	100.0	26.9	476	100.0	2.4	409	100.0	3.9	90	100.0	1.6
TOTAL	223,445		100.0	52,612		100.0	6,113		100.0				70,088		100.0	19,941		100.0	10,469		100.0	5,718		100.0
ROAD DUST																								
Paved																49,317			9,453			2,260		
Unpaved																								

B.C. 1995 Emission Inventory - LFV only



CO: Total = 223,154 tonnes

NOx: Total = 52,455 tonnes

SOx: Total = 6,113 tonnes

VOC: Total = 51,239 tonnes

Part: Total = 19,464 tonnes

PM_{10}: Total = 10,060 tonnes

$PM_{2.5}$: Total = 5,627 tonnes

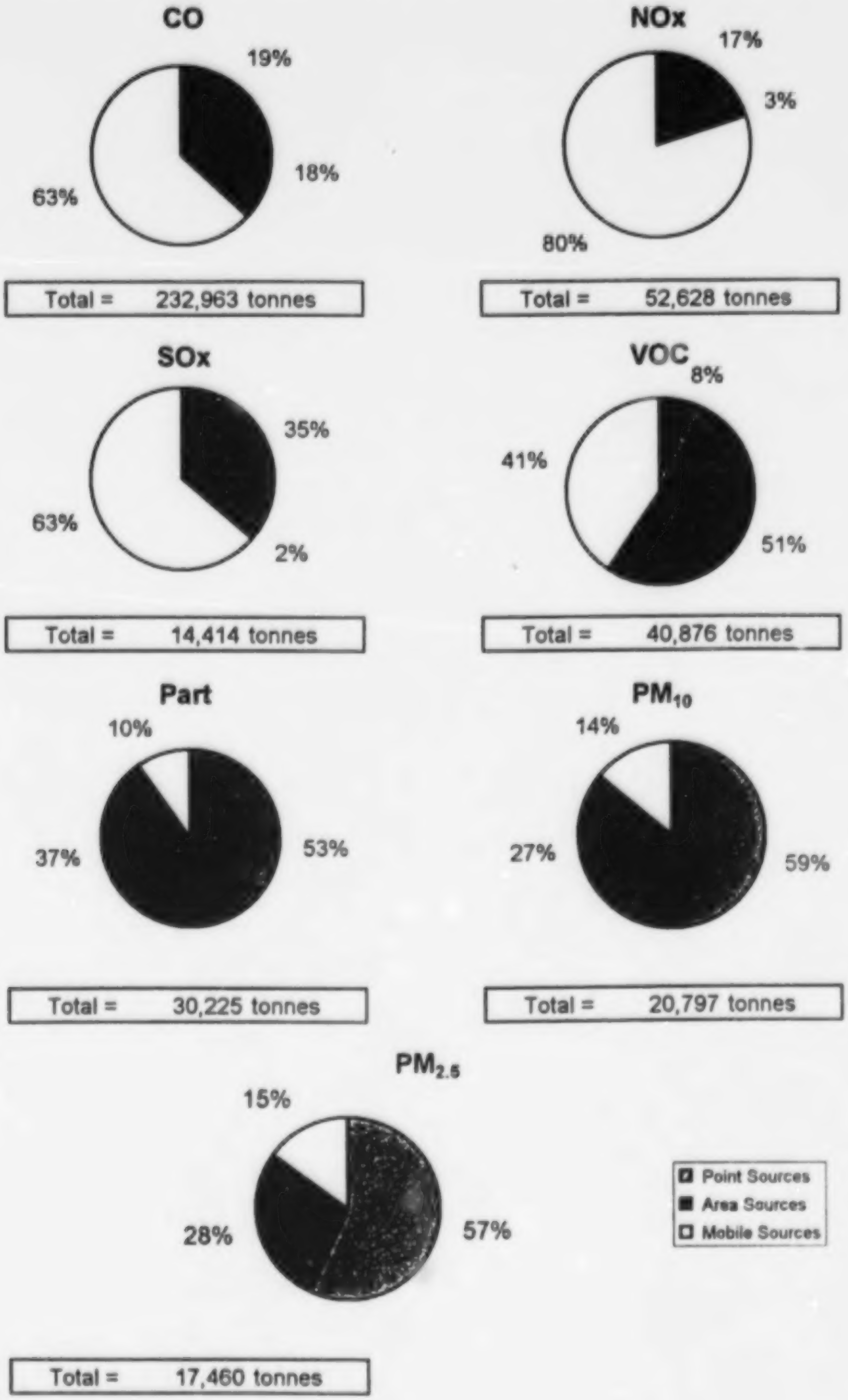
Road dust and natural sources not included.

BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS - VANCOUVER ISLAND (REGION 1)

SOURCE / Category	CO			NOx			SOx			TRS			VOC			Part			PM10			PM2.5		
	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total
ANTHROPOGENIC																								
Point Sources	43,920	18.9	18.7	8,768	16.7	16.5	4,982	34.6	34.6	758	100.0	100.0	3,221	7.9	1.6	16,220	53.7	42.8	12,241	58.9	44.6	9,890	56.6	52.6
Wood Products	692	0.3	0.3	46	0.1	0.1	2	0.0	0.0				108	0.3	0.1	2,155	7.1	5.7	931	4.5	3.4	502	2.9	2.7
Paper and Allied Products	29,259	12.6	12.5	4,388	8.3	8.3	4,369	30.3	30.3	758	100.0	100.0	1,702	4.2	0.9	9,580	31.7	25.3	7,477	36.0	27.2	5,788	33.1	30.8
Mining	917	0.4	0.4	4,026	7.6	7.6	384	2.7	2.7				279	0.7	0.1	701	2.3	1.8	436	2.1	1.6	321	1.8	1.7
Logging	11,858	5.1	5.0	91	0.2	0.2	9	0.1	0.1				1,003	2.5	0.5	2,899	9.6	7.6	2,899	13.9	10.6	2,899	16.6	15.4
Primary Metal Manufacturing				1	0.0	0.0										32	0.1	0.1	31	0.1	0.1	31	0.2	0.2
Refined Petroleum and Coal Products	51	0.0	0.0	147	0.3	0.3	80	0.6	0.6				26	0.1	0.0	308	1.0	0.8	52	0.3	0.2	11	0.1	0.1
Non-Metallic Mineral Products							3	0.0	0.0							30	0.1	0.1	19	0.1	0.1	6	0.0	0.0
Power Generation & Other Utility	255	0.1	0.1	29	0.1	0.1	49	0.3	0.3				25	0.1	0.0	107	0.4	0.3	90	0.4	0.3	83	0.5	0.4
Other	888	0.4	0.4	40	0.1	0.1	86	0.6	0.6				78	0.2	0.0	408	1.3	1.1	306	1.5	1.1	249	1.4	1.3
Area Sources	42,310	18.2	18.0	1,752	3.3	3.3	260	1.8	1.8				21,044	51.5	10.6	11,057	36.6	29.2	5,639	27.1	20.5	4,973	28.5	26.5
Prescribed burning	10,000	4.3	4.3	149	0.3	0.3	0	0.0	0.0				423	1.0	0.2	670	2.2	1.8	458	2.2	1.7	451	2.6	2.4
Space Heating	31,369	13.5	13.4	1,381	2.6	2.6	251	1.7	1.7				10,738	26.3	5.4	4,205	13.9	11.1	4,195	20.2	15.3	3,983	22.8	21.2
Agriculture				46	0.1	0.1							442	1.1	0.2	597	2.0	1.6	220	1.1	0.8	102	0.6	0.5
Oil and Gas	61	0.0	0.0	122	0.2	0.2							4,010	9.8	2.0	14	0.0	0.0	14	0.1	0.1	14	0.1	0.1
Solvent Evaporation													4,389	10.7	2.2									
Miscellaneous Burning	833	0.4	0.4	52	0.1	0.1	9	0.1	0.1				256	0.6	0.1	146	0.5	0.4	144	0.7	0.5	130	0.7	0.7
Other	47	0.0	0.0	2	0.0	0.0							787	1.9	0.4	5,425	17.9	14.3	608	2.9	2.2	293	1.7	1.6
Mobile Sources	146,733	63.0	62.5	42,108	80.0	79.3	9,172	63.6	63.6				16,611	40.6	8.3	2,946	9.8	7.8	2,917	14.0	10.6	2,587	14.8	13.8
Light-Duty Vehicles	131,581	56.5	56.0	10,042	19.1	18.9	387	2.7	2.7				13,373	32.7	6.7	218	0.7	0.6	210	1.0	0.8	132	0.8	0.7
Heavy-Duty Vehicles	7,635	3.3	3.3	7,642	14.5	14.4	135	0.9	0.9				1,228	3.0	0.6	577	1.9	1.5	576	2.8	2.1	510	2.9	2.7
Railways	262	0.1	0.1	1,411	2.7	2.7	99	0.7	0.7				75	0.2	0.0	871	2.9	2.3	871	4.2	3.2	802	4.6	4.3
Marine Vessels	3,663	1.6	1.6	22,153	42.1	41.7	8,527	59.2	59.2				1,558	3.8	0.8	1,155	3.8	3.0	1,155	5.6	4.2	1,063	6.1	5.7
Aircraft	1,718	0.7	0.7	39	0.1	0.1	5	0.0	0.0				129	0.3	0.1	49	0.2	0.1	27	0.1	0.1	19	0.1	0.1
Off-Road	1,874	0.8	0.8	821	1.6	1.5	19	0.1	0.1				248	0.6	0.1	78	0.3	0.2	78	0.4	0.3	71	0.4	0.4
ANTHROPOGENIC SUB-TOTAL	232,963	100.0	99.2	52,628	100.0	99.1	14,414	100.0	100.0	758	100.0	100.0	40,876	100.0	20.5	30,225	100.0	79.7	20,797	100.0	75.7	17,488	100.0	92.9
NATURAL																								
Wildfires	1,877	100.0	0.8	28	5.7	0.1	0	100.0	0.0				79	0.1	0.0	316	4.1	0.8	242	3.6	0.9	223	16.8	1.2
Biogenics				459	94.3	0.9							158,260	99.9	79.4									
Wildlife													156	0.1	0.1									
Marine Aerosol																7,378	95.9	19.5	6,419	96.4	23.4	1,107	83.2	5.9
NATURAL SUB-TOTAL	1,877	100.0	0.8	487	100.0	0.9	0	100.0	0.0				158,495	100.0	79.5	7,694	100.0	20.3	6,661	100.0	24.3	1,330	100.0	7.1
TOTAL	234,840		100.0	53,114		100.0	14,415		100.0	758		100.0	199,371		100.0	37,919		100.0	27,458		100.0	18,790		100.0

ROAD DUST	Part	PM10	PM2.5
Paved	125,187	23,995	5,737
Unpaved	61,686	21,865	3,257

B.C. 1995 Emission Inventory - Vancouver Island (Region 1)



Road dust and natural sources not included.

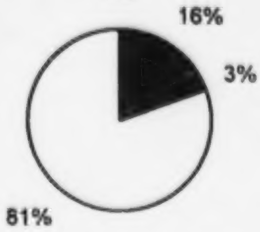
BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS - LOWER MAINLAND REGION 2 - INCLUDING LFV

SOURCE / Category	CO			NOx			SOx			TRS			VOC			Part			PM10			PM2.5		
	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total
ANTHROPOGENIC																								
Point Sources	46,584	16.2	16.0	18,066	22.5	22.4	6,088	41.8	41.8	229	99.6	99.6	6,170	10.3	4.1	15,106	55.2	42.5	7,860	48.4	33.7	4,901	45.4	40.0
Wood Products	4,622	1.6	1.6	323	0.4	0.4	17	0.1	0.1				944	1.6	0.6	3,707	13.5	10.4	1,491	9.2	6.4	780	7.2	6.4
Paper and Allied Products	36,664	12.7	12.6	8,726	10.9	10.8	2,679	18.4	18.4	229	99.6	99.6	2,087	3.5	1.4	3,765	13.8	10.6	2,781	17.1	11.9	2,220	20.6	18.1
Mining																								
Logging	2,756	1.0	0.9	54	0.1	0.1	1	0.0	0.0				303	0.5	0.2	453	1.7	1.3	446	2.7	1.9	444	4.1	3.8
Primary Metal Manufacturing	341	0.1	0.1	19	0.0	0.0	33	0.2	0.2				87	0.1	0.1	255	0.9	0.7	147	0.9	0.6	114	1.1	0.9
Refined Petroleum and Coal Products	242	0.1	0.1	879	1.1	1.1	2,480	17.0	17.0				864	1.4	0.6	580	2.1	1.6	268	1.7	1.1	148	1.4	1.2
Non-Metallic Mineral Products	179	0.1	0.1	5,244	6.5	6.5	655	4.5	4.5				27	0.0	0.0	1,245	4.6	3.5	707	4.4	3.0	291	2.7	2.4
Pipeline Transport	66	0.0	0.0	132	0.2	0.2	1	0.0	0.0				5	0.0	0.0	5	0.0	0.0	5	0.0	0.0	5	0.0	0.0
Area Sources	9,453	3.3	3.3	4,287	5.3	5.3	234	1.6	1.6	1	0.4	0.4	25,524	42.7	17.0	7,901	28.9	22.2	4,086	25.2	17.5	2,107	19.5	17.2
Prescribed Burning	411	0.1	0.1	6	0.0	0.0	0	0.0	0.0				17	0.0	0.0	35	0.1	0.1	25	0.2	0.1	24	0.2	0.2
Space Heating	8,300	2.9	2.9	3,790	4.7	4.7	230	1.6	1.6				2,193	3.7	1.5	1,385	5.1	3.9	1,379	8.5	5.9	1,322	12.2	10.8
Agriculture				391	0.5	0.5							3,421	5.7	2.3	4,604	16.8	12.9	1,929	11.9	8.3	134	1.2	1.1
Oil and Gas	33	0.0	0.0	67	0.1	0.1				1	0.4	0.4	4,967	8.3	3.3	8	0.0	0.0	8	0.0	0.0	8	0.1	0.1
Solvent Evaporation													13,732	23.0	9.2									
Miscellaneous Burning	545	0.2	0.2	28	0.0	0.0	4	0.0	0.0				133	0.2	0.1	79	0.3	0.2	78	0.5	0.3	74	0.7	0.6
Other	164	0.1	0.1	5	0.0	0.0							1,061	1.8	0.7	1,790	6.5	5.0	666	4.1	2.9	545	5.1	4.5
Mobile Sources	232,263	80.6	79.9	58,053	72.2	71.8	8,226	56.5	56.5				28,019	46.9	18.7	4,355	15.9	12.2	4,285	26.4	18.4	3,786	35.1	30.9
Light-Duty Vehicles	205,804	71.4	70.8	20,317	25.3	25.1	787	5.4	5.4				22,577	37.8	15.1	444	1.6	1.2	431	2.7	1.8	274	2.5	2.2
Heavy-Duty Vehicles	6,537	2.3	2.2	7,001	8.7	8.7	113	0.8	0.8				1,009	1.7	0.7	487	1.8	1.4	486	3.0	2.1	430	4.0	3.5
Railways	1,086	0.4	0.4	5,851	7.3	7.2	414	2.8	2.8				309	0.5	0.2	1,956	7.1	5.5	1,956	12.0	8.4	1,799	16.7	14.7
Marine Vessels	6,616	2.3	2.3	20,199	25.1	25.0	6,785	46.6	46.6				2,581	4.3	1.7	1,024	3.7	2.9	1,024	6.3	4.4	942	8.7	7.7
Aircraft	4,845	1.7	1.7	1,000	1.2	1.2	49	0.3	0.3				608	1.0	0.4	125	0.5	0.4	70	0.4	0.3	49	0.5	0.4
Off-Road	7,375	2.6	2.5	3,684	4.6	4.6	78	0.5	0.5				936	1.6	0.6	319	1.2	0.9	318	2.0	1.4	292	2.7	2.4
ANTHROPOGENIC SUB-TOTAL	288,300	100.0	99.2	80,405	100.0	99.5	14,548	100.0	100.0	230	100.0	100.0	59,713	100.0	39.8	27,362	100.0	76.9	16,231	100.0	69.6	10,794	100.0	88.2
NATURAL																								
Wildfires	2,412	100.0	0.8	36	9.0	0.0	0	100.0	0.0				102	0.1	0.1	406	4.9	1.1	310	4.4	1.3	287	19.8	2.3
Biogenics				362	91.0	0.4							89,932	99.7	60.0									
Wildlife													160	0.2	0.1									
Marine Aerosol																7,806	95.1	21.9	6,791	95.6	29.1	1,163	80.2	9.5
NATURAL SUB-TOTAL	2,412	100.0	0.8	397	100.0	0.5	0	100.0	0.0				90,194	100.0	60.2	8,212	100.0	23.1	7,101	100.0	30.4	1,449	100.0	11.8
TOTAL	290,712		100.0	80,803		100.0	14,548		100.0	230		100.0	149,907		100.0	35,573		100.0	23,332		100.0	12,243		100.0

ROAD DUST	Part	PM10	PM2.5
Paved	63,419	12,156	2,906
Unpaved	6,608	2,354	349

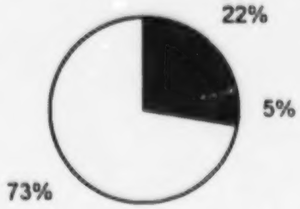
B.C. 1995 Lower Mainland (Region 2) with LFV

CO



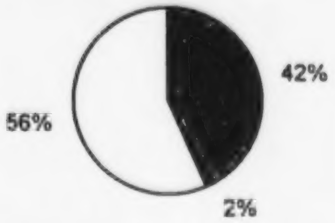
Total = 288,300 tonnes

NOx



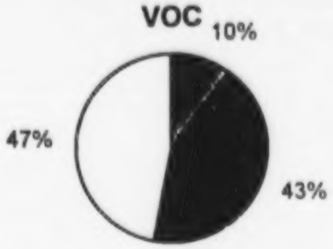
Total = 80,405 tonnes

SOx



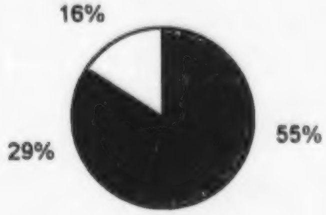
Total = 14,548 tonnes

VOC



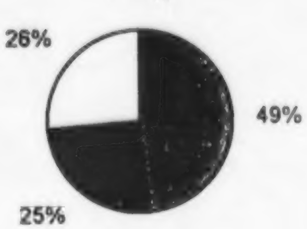
Total = 59,713 tonnes

Part



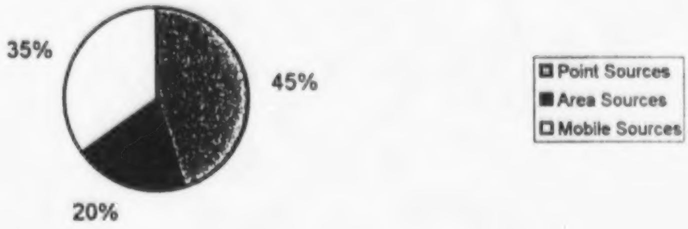
Total = 27,362 tonnes

PM_{10}



Total = 16,231 tonnes

$PM_{2.5}$



Total = 10,794 tonnes

Road dust and natural sources not included.

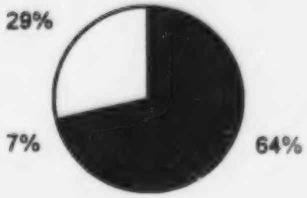
BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS - LOWER MAINLAND (REGION 2) - EXCLUDING LFV

SOURCE / Category	CO			NOx			SOx			TRS			VOC			Part			PM10			PM2.5		
	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total
ANTHROPOGENIC																								
Point Sources	42,093	64.6	62.6	8,881	31.8	31.5	2,750	32.6	32.6	229	99.6	99.6	2,587	30.5	3.2	4,619	58.5	29.5	3,641	59.0	28.3	2,906	56.2	44.5
Wood Products	3,440	5.3	5.1	84	0.3	0.3	3	0.0	0.0				317	3.7	0.4	837	10.6	5.4	414	6.7	3.2	252	4.9	3.9
Paper and Allied Products	36,395	55.9	54.1	8,530	30.6	30.3	2,672	31.7	31.7	229	99.6	99.6	2,055	24.3	2.6	3,197	40.5	20.4	2,733	44.3	21.2	2,177	42.1	33.3
Mining																								
Logging	1,167	1.8	1.7	9	0.0	0.0	1	0.0	0.0				99	1.2	0.1	271	3.4	1.7	264	4.3	2.1	262	5.1	4.0
Refined Petroleum and Coal Products	58	0.1	0.1	194	0.7	0.7	67	0.8	0.8				26	0.3	0.0	96	1.2	0.6	24	0.4	0.2	12	0.2	0.2
Non-Metallic Mineral Products																								
Power Generation & Other Utility	1,022	1.6	1.5	8	0.0	0.0	1	0.0	0.0				86	1.0	0.1	199	2.5	1.3	199	3.2	1.5	199	3.9	3.0
Other	11	0.0	0.0	47	0.2	0.2	6	0.1	0.1				4	0.0	0.0	19	0.2	0.1	7	0.1	0.1	4	0.1	0.1
Area Sources	4,450	6.8	6.6	254	0.9	0.9	33	0.4	0.4	1	0.4	0.4	3,249	38.4	4.1	1,497	18.9	9.6	748	12.1	5.8	634	12.3	9.7
Prescribed burning	294	0.5	0.4	4	0.0	0.0	0	0.0	0.0				12	0.1	0.0	29	0.4	0.2	21	0.3	0.2	20	0.4	0.3
Space Heating	3,937	6.0	5.9	170	0.6	0.6	31	0.4	0.4				1,348	15.9	1.7	528	6.7	3.4	526	8.5	4.1	500	9.7	7.7
Agriculture				3	0.0	0.0							221	2.6	0.3	258	3.2	1.6	89	1.4	0.7	42	0.8	0.6
Oil and Gas	33	0.1	0.0	67	0.2	0.2				1	0.4	0.4	891	10.5	1.1	8	0.1	0.1	8	0.1	0.1	8	0.2	0.1
Solvent Evaporation													509	6.0	0.6									
Miscellaneous Burning	181	0.3	0.3	10	0.0	0.0	2	0.0	0.0				53	0.6	0.1	32	0.4	0.2	32	0.5	0.2	29	0.6	0.4
Other	5	0.0	0.0										215	2.5	0.3	644	8.2	4.1	72	1.2	0.6	35	0.7	0.5
Mobile Sources	18,603	28.6	27.7	18,815	67.3	66.7	5,651	67.0	67.0				2,635	31.1	3.3	1,783	22.6	11.4	1,782	28.9	13.9	1,629	31.5	25.0
Light-Duty Vehicles	15,276	23.4	22.7	1,166	4.2	4.1	45	0.5	0.5				1,552	18.3	1.9	25	0.3	0.2	24	0.4	0.2	15	0.3	0.2
Heavy-Duty Vehicles	886	1.4	1.3	887	3.2	3.1	16	0.2	0.2				143	1.7	0.2	67	0.8	0.4	67	1.1	0.5	59	1.1	0.9
Railways	271	0.4	0.4	1,458	5.2	5.2	102	1.2	1.2				77	0.9	0.1	900	11.4	5.8	900	14.6	7.0	829	16.0	12.7
Marine Vessels	1,002	2.8	2.7	15,155	54.2	53.8	5,485	65.0	65.0				820	9.7	1.0	776	9.8	5.0	776	12.6	6.0	714	13.8	10.9
Aircraft																								
Off-Road	368	0.6	0.5	140	0.5	0.5	3	0.0	0.0				43	0.5	0.1	15	0.2	0.1	15	0.2	0.1	13	0.3	0.2
ANTHROPOGENIC SUB-TOTAL	65,146	100.0	96.8	27,950	100.0	99.1	8,434	100.0	100.0	230	100.0	100.0	8,471	100.0	10.6	7,899	100.0	50.5	6,171	100.0	48.0	5,169	100.0	79.2
NATURAL																								
Wildfires	2,121	100.0	3.2	32	13.1	0.1	0	100.0	0.0				90	0.1	0.1	357	4.6	2.3	273	4.1	2.1	252	18.5	3.9
Biogenics				209	86.9	0.7							71,100	99.7	89.1									
Wildlife													156	0.2	0.2									
Marine Aerosol																7,378	95.4	47.2	6,419	95.9	49.9	1,107	81.5	17.0
NATURAL SUB-TOTAL	2,121	100.0	3.2	241	100.0	0.9	0	100.0	0.0				71,346	100.0	89.4	7,735	100.0	49.5	6,692	100.0	52.0	1,359	100.0	20.8
TOTAL	67,268		100.0	28,191		100.0	8,434		100.0	230		100.0	79,817		100.0	15,634		100.0	12,863		100.0	6,528		100.0

ROAD DUST	Part	PM10	PM2.5
Paved	14,102	2,703	646
Unpaved	6,608	2,354	349

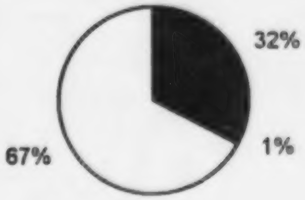
B.C. 1995 Lower Mainland (Region 2) without LFV

CO



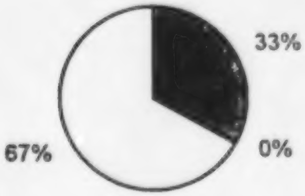
Total = 65,146 tonnes

NOx



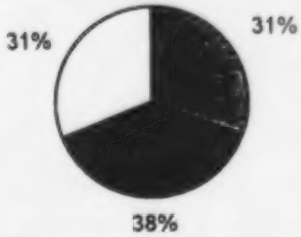
Total = 27,950 tonnes

SOx



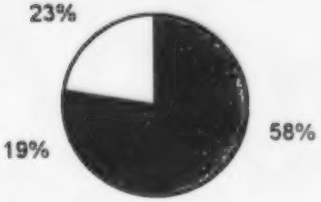
Total = 8,434 tonnes

VOC



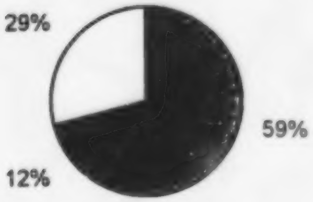
Total = 8,471 tonnes

Part



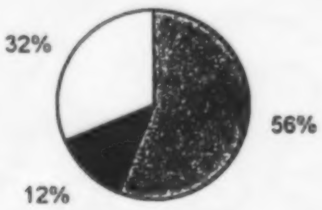
Total = 7,899 tonnes

PM_{10}



Total = 6,171 tonnes

$PM_{2.5}$



▨ Point Sources
■ Area Sources
□ Mobile Sources

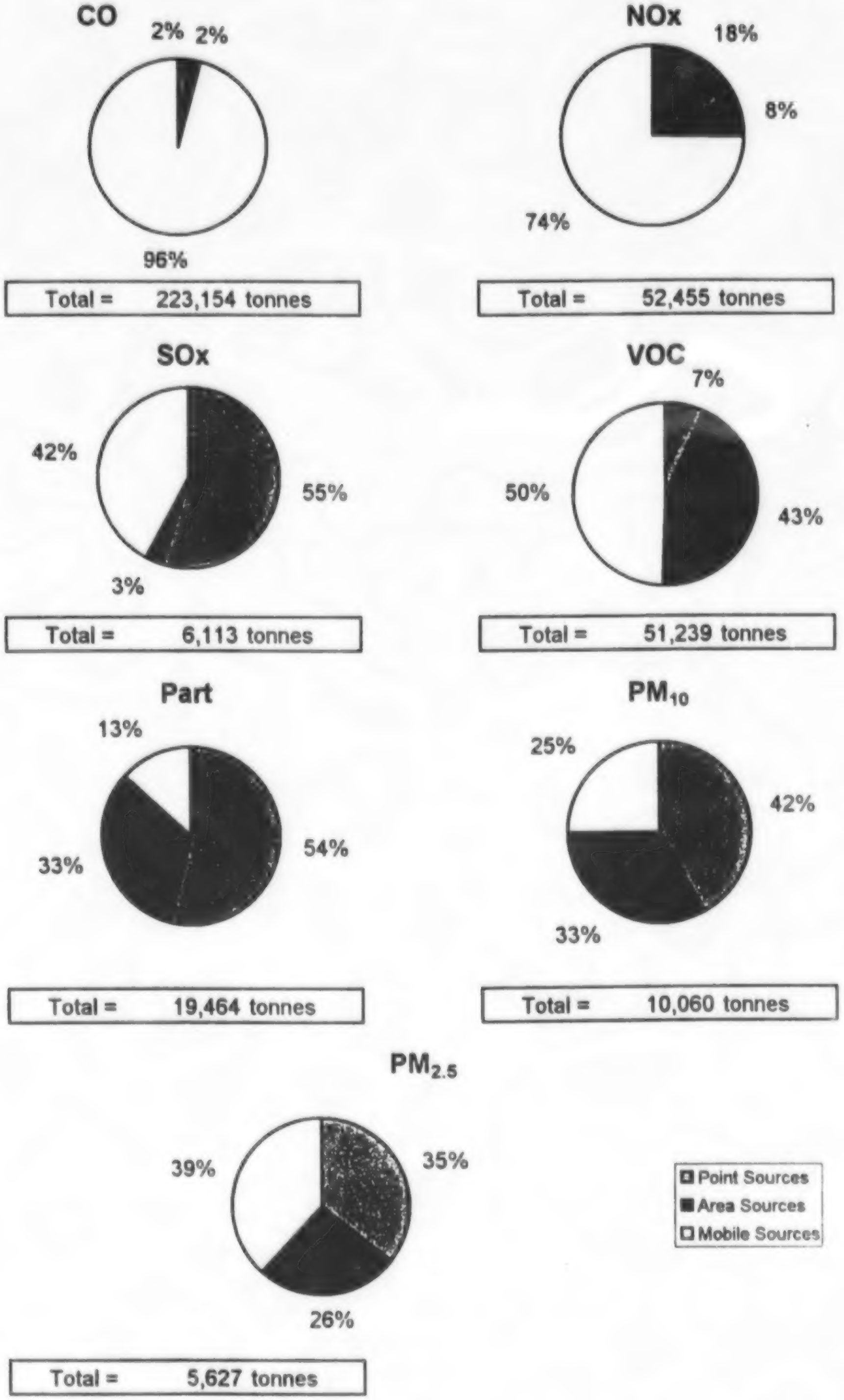
Total = 5,169 tonnes

Road dust and natural sources not included.

BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS - LOWER MAINLAND (REGION 2) LFV ONLY

SOURCE / Category	CO			NOx			SOx			TRS			VOC			Part			PM10			PM2.5		
	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total
ANTHROPOGENIC																								
Point Sources	4,491	2.0	2.0	9,185	17.5	17.5	3,337	54.6	54.6				3,581	7.0	5.1	10,488	53.9	52.6	4,219	41.9	40.3	1,997	35.5	34.9
Wood Products	1,182	0.5	0.5	239	0.5	0.5	14	0.2	0.2				627	1.2	0.9	2,870	14.7	14.4	1,077	10.7	10.3	529	9.4	9.3
Paper and Allied Products	269	0.1	0.1	187	0.4	0.4	7	0.1	0.1				31	0.1	0.0	568	2.9	2.8	48	0.5	0.5	43	0.8	0.8
Logging	1,589	0.7	0.7	45	0.1	0.1							204	0.4	0.3	182	0.9	0.9	182	1.8	1.7	182	3.2	3.2
Primary Metal Manufacturing	341	0.2	0.2	19	0.0	0.0	33	0.5	0.5				87	0.2	0.1	255	1.3	1.3	147	1.5	1.4	114	2.0	2.0
Refined Petroleum and Coal Products	184	0.1	0.1	685	1.3	1.3	2,412	39.5	39.5				837	1.6	1.2	484	2.5	2.4	244	2.4	2.3	136	2.4	2.4
Non-Metallic Mineral Products	179	0.1	0.1	5,244	10.0	10.0	655	10.7	10.7				27	0.1	0.0	1,245	6.4	6.2	707	7.0	6.8	291	5.2	5.1
Pipeline Transport	66	0.0	0.0	132	0.3	0.3	1	0.0	0.0				5	0.0	0.0	5	0.0	0.0	5	0.0	0.0	5	0.1	0.1
Power Generation & Other Utility	449	0.2	0.2	1,872	3.6	3.6	164	2.7	2.7				33	0.1	0.0	103	0.5	0.5	95	0.9	0.9	94	1.7	1.8
Other	232	0.1	0.1	762	1.5	1.4	51	0.8	0.8				1,730	3.4	2.5	4,776	24.5	24.0	1,714	17.0	16.4	603	10.7	10.5
Area Sources	5,003	2.2	2.2	4,032	7.7	7.7	201	3.3	3.3				22,274	43.5	31.8	6,404	32.9	32.1	3,338	33.2	31.9	1,474	26.2	25.8
Prescribed Burning	117	0.1	0.1	2	0.0	0.0	0	0.0	0.0				5	0.0	0.0	7	0.0	0.0	5	0.0	0.0	5	0.1	0.1
Space Heating	4,363	2.0	2.0	3,620	6.9	6.9	199	3.3	3.3				845	1.6	1.2	857	4.4	4.3	853	8.5	8.1	822	14.6	14.4
Agriculture				388	0.7	0.7							3,200	6.2	4.6	4,348	22.3	21.8	1,840	18.3	17.6	92	1.6	1.6
Oil and Gas													4,076	8.0	5.8									
Solvent Evaporation													13,223	25.8	18.9									
Miscellaneous Burning	364	0.2	0.2	18	0.0	0.0	2	0.0	0.0				80	0.2	0.1	47	0.2	0.2	46	0.5	0.4	45	0.8	0.8
Other	159			5									846			1,146			594			510		
Mobile Sources	213,660	95.7	95.6	39,238	74.8	74.6	2,575	42.1	42.1				25,384	49.5	36.2	2,572	13.2	12.9	2,503	24.9	23.9	2,157	38.3	37.7
Light-Duty Vehicles	190,528	85.4	85.3	19,151	36.5	36.4	742	12.1	12.1				21,025	41.0	30.0	419	2.2	2.1	407	4.0	3.9	259	4.6	4.5
Heavy-Duty Vehicles	5,651	2.5	2.5	6,114	11.7	11.6	97	1.6	1.6				866	1.7	1.2	420	2.2	2.1	419	4.2	4.0	371	6.6	6.5
Railways	815	0.4	0.4	4,393	8.4	8.3	312	5.1	5.1				232	0.5	0.3	1,056	5.4	5.3	1,056	10.5	10.1	971	17.3	17.0
Marine Vessels	4,814	2.2	2.2	5,044	9.6	9.6	1,300	21.3	21.3				1,761	3.4	2.5	248	1.3	1.2	248	2.5	2.4	228	4.1	4.0
Aircraft	4,845	2.2	2.2	1,000	1.9	1.9	49	0.8	0.8				608	1.2	0.9	125	0.6	0.6	70	0.7	0.7	49	0.9	0.9
Off-Road	7,007	3.1	3.1	3,535	6.7	6.7	75	1.2	1.2				893	1.7	1.3	304	1.6	1.5	303	3.0	2.9	279	5.0	4.9
ANTHROPOGENIC SUB-TOTAL	223,154	100.0	99.9	52,455	100.0	99.7	6,113	100.0	100.0				51,239	100.0	73.1	19,464	100.0	97.6	10,060	100.0	96.1	5,627	100.0	98.4
NATURAL																								
Wildfires	291	100.0	0.1	4	2.8	0.0	0	100.0	0.0				12	0.1	0.0	49	10.3	0.2	37	9.1	0.4	35	38.2	0.6
Biogenics				153	97.2	0.3							18,832	99.9	26.9									
Wildlife													4	0.0	0.0									
Marine Aerosol																428	89.7	2.1	372	90.9	3.6	56	61.8	1.0
NATURAL SUB-TOTAL	291	100.0	0.1	157	100.0	0.3	0	100.0	0.0				18,849	100.0	26.9	476	100.0	2.4	409	100.0	3.9	90	100.0	1.6
TOTAL	223,445		100.0	52,612		100.0	6,113		100.0				70,088		100.0	19,941		100.0	10,469		100.0	5,718		100.0
ROAD DUST																								
Paved																49,317			9,453			2,260		
Unpaved																								

B.C. 1995 Emission Inventory Lower Mainland (Region 2) - LFV only



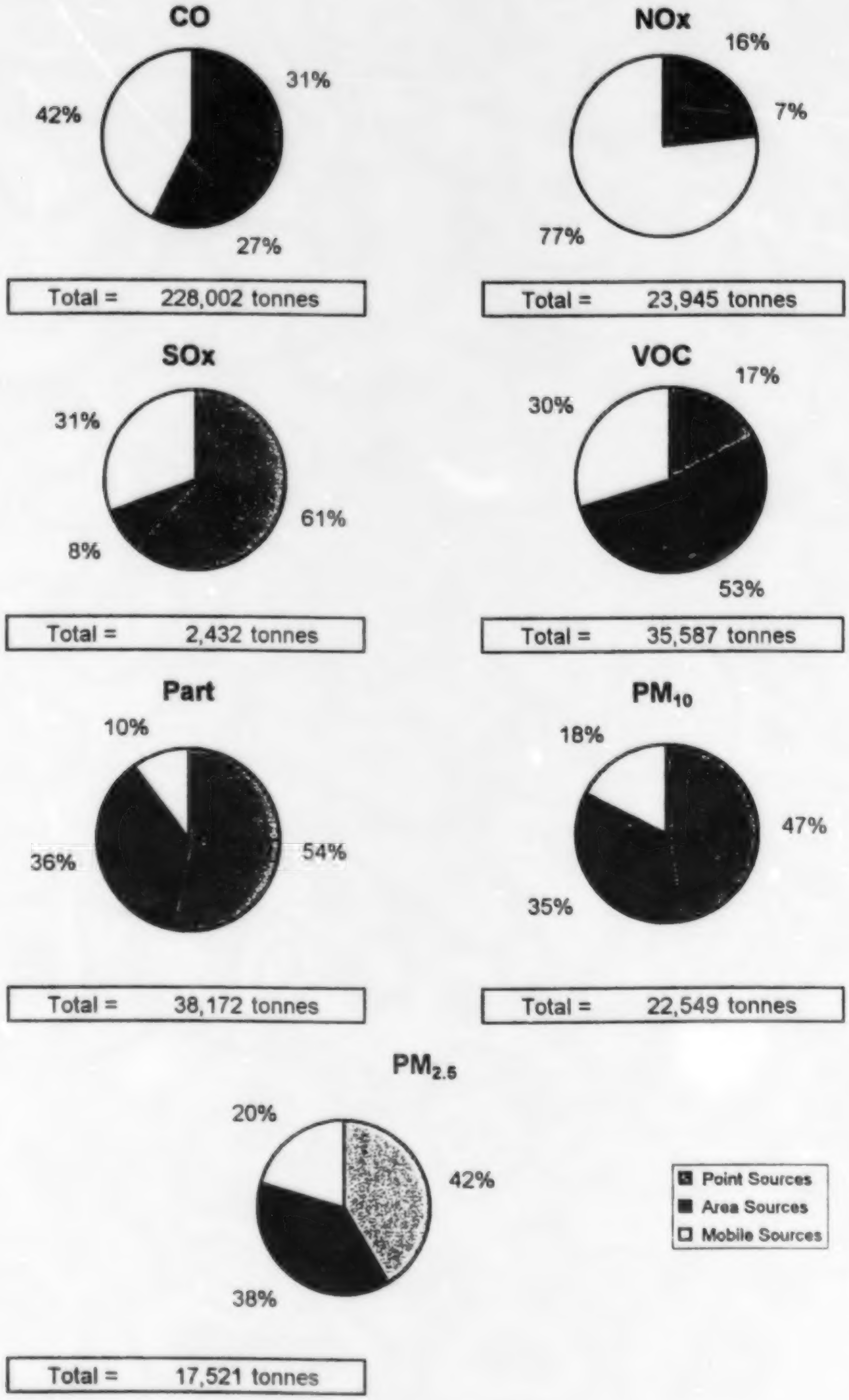
Road dust and natural sources not included.

BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS - SOUTHERN INTERIOR (REGION 3)

SOURCE / Category	CO			NOx			SOx			TRS			VOC			Part			PM10			PM2.5		
	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total
ANTHROPOGENIC																								
Point Sources	69,596	30.5	28.4	3,929	16.4	15.6	1,502	61.8	61.7	28	93.3	93.3	6,126	17.2	1.6	20,402	53.4	42.2	10,799	47.9	34.7	7,285	41.5	35.2
Wood Products	62,130	27.2	25.4	963	4.0	3.8	78	3.2	3.2				5,467	15.4	1.4	12,294	32.2	25.4	6,721	29.8	21.6	4,465	25.5	21.6
Paper and Allied Products	2,415	1.1	1.0	473	2.0	1.9	282	11.6	11.6	26	86.7	86.7	2	0.0	0.0	4,176	10.9	8.6	2,577	11.4	8.3	1,911	10.9	9.3
Mining	17	0.0	0.0	67	0.3	0.3	103	4.2	4.2	2	6.7	6.7	2	0.0	0.0	838	2.2	1.7	311	1.4	1.0	110	0.6	0.5
Logging	4,036	1.8	1.6	31	0.1	0.1	3	0.1	0.1				342	1.0	0.1	457	1.2	0.9	251	1.1	0.8	183	1.0	0.9
Primary Metal Manufacturing	38	0.0	0.0	24	0.1	0.1										125	0.3	0.3	1	0.0	0.0	29	0.2	0.1
Refined Petroleum and Coal Products	175	0.1	0.1	515	2.2	2.0	262	10.8	10.8				82	0.2	0.0	724	1.9	1.5	144	0.6	0.5	42	0.2	0.2
Non-Metallic Mineral Products	47	0.0	0.0	1,260	5.3	5.0	757	31.1	31.1				58	0.2	0.0	940	2.5	1.9	415	1.8	1.3	296	1.5	1.3
Pipeline Transport	586	0.3	0.2	333	1.4	1.3							58	0.2	0.0	65	0.2	0.1	65	0.3	0.2	64	0.4	0.3
Power Generation & Other Utility	9	0.0	0.0	8	0.0	0.0	1	0.0	0.0				1	0.0	0.0	26	0.1	0.1	26	0.1	0.1	28	0.1	0.1
Other	143	0.1	0.1	255	1.1	1.0	16	0.7	0.7				114	0.3	0.0	757	2.0	1.6	288	1.3	0.9	170	1.0	0.8
Area Sources	61,033	26.8	24.9	1,628	6.8	6.4	183	7.5	7.5	2	6.7	6.7	18,883	53.1	4.8	13,804	36.2	28.5	7,798	34.6	25.0	6,675	38.1	32.3
Prescribed burning	34,246	15.0	14.0	509	2.1	2.0	2	0.1	0.1				1,448	4.1	0.4	3,685	9.7	7.6	2,707	12.0	8.7	2,557	14.6	12.4
Space Heating	25,768	11.3	10.5	964	4.0	3.8	173	7.1	7.1				8,828	24.8	2.3	3,442	9.0	7.1	3,436	15.2	11.0	3,262	18.6	15.8
Agriculture				94	0.4	0.4							2,646	7.4	0.7	2,939	7.7	6.1	1,084	4.8	3.5	507	2.9	2.5
Oil and Gas	6	0.0	0.0	12	0.1	0.0				2	6.7	6.7	2,307	6.5	0.6	1	0.0	0.0	1	0.0	0.0	1	0.0	0.0
Solvent Evaporation													2,885	8.1	0.7									
Miscellaneous Burning	982	0.4	0.4	48	0.2	0.2	8	0.3	0.3				262	0.7	0.1	174	0.5	0.4	172	0.8	0.6	156	0.9	0.8
Other	31	0.0	0.0	1	0.0	0.0							507	1.4	0.1	3,563	9.3	7.4	398	1.8	1.3	192	1.1	0.9
Mobile Sources	97,373	42.7	39.8	18,368	76.8	72.8	747	30.7	30.7				10,578	29.7	2.7	3,966	10.4	8.2	3,952	17.5	12.7	3,581	20.4	17.4
Light-Duty Vehicles	86,506	37.9	35.3	6,602	27.6	26.1	254	10.4	10.4				8,792	24.7	2.2	143	0.4	0.3	138	0.6	0.4	87	0.5	0.4
Heavy-Duty Vehicles	5,020	2.2	2.0	5,024	21.0	19.9	89	3.7	3.7				807	2.3	0.2	379	1.0	0.8	379	1.7	1.2	335	1.9	1.6
Railways	987	0.4	0.4	5,315	22.2	21.0	372	15.3	15.3				281	0.8	0.1	3,282	8.6	6.8	3,282	14.6	10.5	3,020	17.2	14.6
Marine Vessels	854	0.4	0.3	14	0.1	0.1	2	0.1	0.1				278	0.8	0.1									
Aircraft	554	0.2	0.2	21	0.1	0.1	3	0.1	0.1				65	0.2	0.0	20	0.1	0.0	11	0.0	0.0	8	0.0	0.0
Off-Road	3,452	1.5	1.4	1,412	5.9	5.6	27	1.1	1.1				355	1.0	0.1	142	0.4	0.3	142	0.6	0.5	131	0.7	0.6
ANTHROPOGENIC SUB-TOTAL	228,002	100.0	93.1	23,945	100.0	94.8	2,432	100.0	100.0	30	100.0	100.0	35,587	100.0	9.1	38,172	100.0	78.9	22,549	100.0	72.4	17,521	100.0	84.9
NATURAL																								
Wildfires	16,904	100.0	6.9	251	19.2	1.0	1	100.0	0.0				715	0.2	0.2	2,845	27.8	5.9	2,176	25.3	7.0	2,008	64.5	9.7
Biogenics				1,057	80.8	4.2							354,924	99.8	90.7									
Wildlife													156	0.0	0.0									
NATURAL SUB-TOTAL	16,904	100.0	6.9	1,308	100.0	5.2	1	100.0	0.0				355,795	100.0	90.9	10,223	100.0	21.1	8,595	100.0	27.6	3,115	100.0	15.1
TOTAL	244,906		100.0	25,253		100.0	2,433		100.0	30		100.0	391,382		100.0	48,396		100.0	31,144		100.0	20,636		100.0

ROAD DUST			
Paved	147,443	28,260	6,757
Unpaved	76,556	24,193	3,603

B.C. 1995 Emission Inventory - Southern Interior (Region 3)



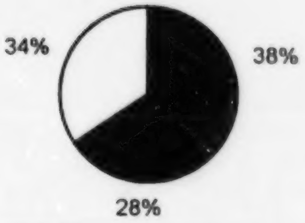
Road dust and natural sources not included.

BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS - KOOTENAY (REGION 4)

SOURCE / Category	CO			NOx			SOx			TRS			VOC			Part			PM10			PM2.5		
	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total
ANTHROPOGENIC																								
Point Sources	40,465	37.5	37.2	4,589	29.2	27.9	18,333	96.7	96.7	70	100.0	100.0	5,025	29.5	1.9	12,273	53.3	40.1	7,646	48.6	34.3	5,214	41.9	38.2
Wood Products	32,682	30.3	30.0	306	1.9	1.9	34	0.2	0.2				2,901	17.0	1.1	6,484	28.2	21.2	3,479	22.1	15.6	2,441	19.6	17.9
Paper and Allied Products	6,794	6.3	6.2	1,364	8.7	8.3	874	4.6	4.6	70	100.0	100.0	415	2.4	0.2	888	3.9	2.9	570	3.6	2.6	432	3.5	3.2
Mining	45	0.0	0.0	1,359	8.6	8.3	2,116	11.2	11.2				822	4.8	0.3	1,868	8.1	6.1	1,429	9.1	6.4	588	4.7	4.3
Logging	86	0.1	0.1	1	0.0	0.0							7	0.0	0.0	21	0.1	0.1	21	0.1	0.1	21	0.2	0.2
Primary Metal Manufacturing							15,114	79.7	79.7							1,909	8.3	6.2	1,525	9.7	6.8	1,291	10.4	9.4
Refined Petroleum and Coal Products	63	0.1	0.1	243	1.5	1.5	173	0.9	0.9				24	0.1	0.0	185	0.8	0.6	44	0.3	0.2	18	0.1	0.1
Non-Metallic Mineral Products																								
Pipeline Transport	459	0.4	0.4	1,003	6.4	6.1	5	0.0	0.0				815	4.8	0.3	106	0.5	0.3	106	0.7	0.5	106	0.9	0.8
Power Generation & Other Utility	2	0.0	0.0										1	0.0	0.0	3	0.0	0.0	1	0.0	0.0	1	0.0	0.0
Other	334	0.3	0.3	313	2.0	1.9	17	0.1	0.1				40	0.2	0.0	809	3.5	2.6	471	3.0	2.1	318	2.5	2.3
Area Sources	30,315	28.1	27.8	737	4.7	4.5	97	0.5	0.5				7,858	46.2	2.9	7,091	30.8	23.2	4,439	28.2	19.9	3,882	31.2	28.4
Prescribed burning	19,433	18.0	17.8	289	1.8	1.8	1	0.0	0.0				822	4.8	0.3	3,153	13.7	10.3	2,405	15.3	10.8	2,223	17.9	16.3
Space Heating	10,394	9.6	9.5	370	2.4	2.3	66	0.3	0.3				3,562	20.9	1.3	1,387	6.0	4.5	1,385	8.8	6.2	1,315	10.6	9.6
Agriculture				34	0.2	0.2							738	4.3	0.3	1,090	4.7	3.6	411	2.6	1.8	194	1.6	1.4
Oil and Gas	5	0.0	0.0	13	0.1	0.1	26	0.1	0.1				873	5.1	0.3	1	0.0	0.0	1	0.0	0.0	1	0.0	0.0
Solvent Evaporation													1,078	6.3	0.4									
Miscellaneous Burning	470	0.4	0.4	25	0.2	0.2	4	0.0	0.0				134	0.8	0.0	84	0.4	0.3	83	0.5	0.4	78	0.6	0.6
Other	13	0.0	0.0	6	0.0	0.0							651	3.8	0.2	1,376	6.0	4.5	154	1.0	0.7	73	0.6	0.5
Mobile Sources	37,036	34.4	34.0	10,395	66.1	63.3	526	2.8	2.8				4,136	24.3	1.5	3,653	15.9	11.9	3,647	23.2	16.4	3,338	26.8	24.4
Light-Duty Vehicles	32,314	30.0	29.7	2,466	15.7	15.0	95	0.5	0.5				3,284	19.3	1.2	53	0.2	0.2	51	0.3	0.2	32	0.3	0.2
Heavy-Duty Vehicles	1,875	1.7	1.7	1,877	11.9	11.4	33	0.2	0.2				302	1.8	0.1	142	0.6	0.5	141	0.9	0.6	125	1.0	0.9
Railways	1,022	0.9	0.9	5,503	35.0	33.5	386	2.0	2.0				291	1.7	0.1	3,398	14.8	11.1	3,398	21.6	15.2	3,127	25.2	22.9
Marine Vessels	319	0.3	0.3	5	0.0	0.0	1	0.0	0.0				104	0.6	0.0									
Aircraft	184	0.2	0.2	4	0.0	0.0	1	0.0	0.0				19	0.1	0.0	6	0.0	0.0	3	0.0	0.0	2	0.0	0.0
Off-Road	1,322	1.2	1.2	540	3.4	3.3	10	0.1	0.1				136	0.8	0.1	54	0.2	0.2	54	0.3	0.2	50	0.4	0.4
ANTHROPOGENIC SUB-TOTAL	107,816	100.0	99.0	15,721	100.0	95.7	18,956	100.0	100.0	70	100.0	100.0	17,019	100.0	6.3	23,017	100.0	75.3	15,732	100.0	70.6	12,432	100.0	91.0
NATURAL																								
Wildfires	1,067	100.0	1.0	16	2.3	0.1	0	100.0	0.0				45	0.0	0.0	180	2.4	0.6	137	2.1	0.6	127	10.3	0.9
Biogenics				683	97.7	4.2							251,705	99.9	93.6									
Wildlife													156	0.1	0.1									
NATURAL SUB-TOTAL	1,067	100.0	1.0	699	100.0	4.3	0	100.0	0.0				251,906	100.0	93.7	7,558	100.0	24.7	6,556	100.0	29.4	1,234	100.0	9.0
TOTAL	108,883		100.0	16,419		100.0	18,956		100.0	70		100.0	268,925		100.0	30,575		100.0	22,289		100.0	13,666		100.0
													ROAD DUST											
													Paved			48,589			9,313			2,227		
													Unpaved			25,313			8,043			1,191		

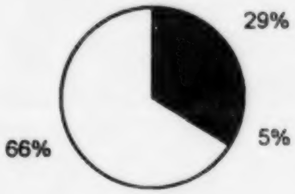
B.C. 1995 Emission Inventory - Kootenay (Region 4)

CO



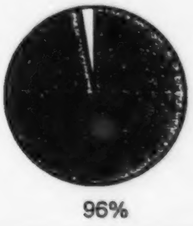
Total = 107,816 tonnes

NOx



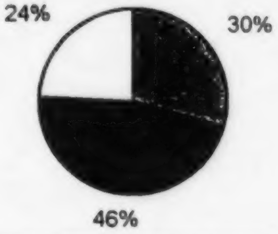
Total = 15,721 tonnes

SOx



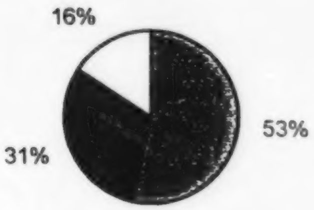
Total = 18,956 tonnes

VOC



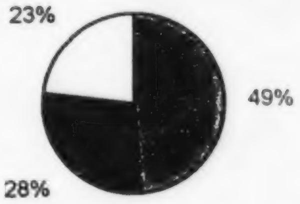
Total = 17,019 tonnes

Part



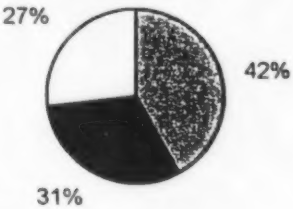
Total = 23,017 tonnes

PM_{10}



Total = 15,732 tonnes

$PM_{2.5}$



☐ Point Sources
■ Area Sources
☐ Mobile Sources

Total = 12,432 tonnes

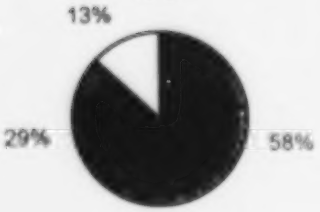
Road dust and natural sources not included.

BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS - CARIBOO (REGION 5)

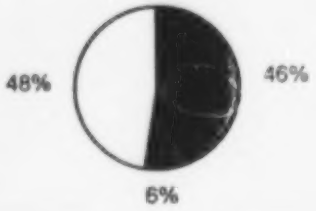
SOURCE / Category	CO			NOx			SOx			TRS			VOC			Part			PM10			PM2.5		
	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total
ANTHROPOGENIC																								
Point Sources	76,108	57.9	50.9	5,103	46.3	41.7	2,263	80.5	80.4	37	97.4	97.4	6,063	44.1	1.7	14,201	61.9	52.7	7,933	56.8	46.4	5,298	50.0	41.2
Wood Products	64,783	49.2	43.3	2,261	20.5	18.5	120	4.3	4.3				5,286	38.5	1.5	12,181	53.1	45.2	6,815	48.8	39.8	4,578	43.2	35.6
Paper and Allied Products	5,557	4.2	3.7	805	7.3	6.6	1,145	40.7	40.7	37	97.4	97.4	272	2.0	0.1	938	4.1	3.5	630	4.5	3.7	446	4.2	3.5
Mining	165	0.1	0.1	220	2.0	1.8	46	1.6	1.6				8	0.1	0.0	492	2.1	1.8	210	1.5	1.2	62	0.6	0.5
Logging	5	0.0	0.0													1	0.0	0.0	1	0.0	0.0	1	0.0	0.0
Refined Petroleum and Coal Products	141	0.1	0.1	274	2.5	2.2	875	31.1	31.1				85	0.6	0.0	317	1.4	1.2	68	0.5	0.4	20	0.2	0.2
Non-Metallic Mineral Products																								
Pipeline Transport	605	0.5	0.4	211	1.9	1.7							52	0.4	0.0	84	0.4	0.3	84	0.6	0.5	83	0.8	0.6
Power Generation & Other Utility	4,852	3.7	3.2	1,332	12.1	10.9	77	2.7	2.7				355	2.6	0.1	187	0.8	0.7	124	0.9	0.7	106	1.0	0.8
Other													5	0.0	0.0	1	0.0	0.0	1	0.0	0.0			
Area Sources	38,176	29.0	25.5	698	6.3	5.7	32	1.1	1.1	1	2.6	2.6	5,783	41.9	1.6	7,546	32.9	28.0	4,831	34.6	28.2	4,202	39.7	32.7
Prescribed burning	33,241	25.3	22.2	494	4.5	4.0	2	0.1	0.1				1,406	10.2	0.4	4,638	20.2	17.2	3,496	25.0	20.4	3,254	30.7	25.3
Space Heating	4,567	3.5	3.1	157	1.4	1.3	28	1.0	1.0				1,565	11.4	0.4	609	2.7	2.3	608	4.4	3.6	577	5.5	4.5
Agriculture				31	0.3	0.3							1,599	11.6	0.4	1,647	7.2	6.1	598	4.3	3.5	282	2.7	2.2
Oil and Gas	1	0.0	0.0	2	0.0	0.0				1	2.6	2.6	483	3.5	0.1									
Solvent Evaporation													474	3.5	0.1									
Miscellaneous Burning	362	0.3	0.2	14	0.1	0.1	2	0.1	0.1				87	0.6	0.0	64	0.3	0.2	64	0.5	0.4	58	0.5	0.5
Other	5	0.0	0.0										149	1.1	0.0	588	2.6	2.2	65	0.5	0.4	31	0.3	0.2
Mobile Sources	17,260	13.1	11.5	5,223	47.4	42.7	518	18.4	18.4				1,913	13.9	0.5	1,195	5.2	4.4	1,193	8.5	7.0	1,088	10.3	8.5
Light-Duty Vehicles	14,207	10.8	9.5	1,084	9.8	8.9	42	1.5	1.5				1,444	10.5	0.4	24	0.1	0.1	23	0.2	0.1	14	0.1	0.1
Heavy-Duty Vehicles	824	0.6	0.6	825	7.5	6.7	15	0.5	0.5				133	1.0	0.0	62	0.3	0.2	62	0.4	0.4	55	0.5	0.4
Railways	297	0.2	0.2	1,599	14.5	13.1	112	4.0	4.0				84	0.6	0.0	988	4.3	3.7	988	7.1	5.8	909	8.6	7.1
Marine Vessels	263	0.2	0.2	1,084	9.8	8.9	338	12.0	12.0				100	0.7	0.0	53	0.2	0.2	53	0.4	0.3	49	0.5	0.4
Aircraft	93	0.1	0.1	2	0.0	0.0							6	0.0	0.0	3	0.0	0.0	2	0.0	0.0	1	0.0	0.0
Off-Road	1,576	1.2	1.1	629	5.7	5.1	11	0.4	0.4				146	1.1	0.0	65	0.3	0.2	65	0.5	0.4	60	0.6	0.5
ANTHROPOGENIC SUB-TOTAL	131,544	100.0	88.0	11,024	100.0	90.2	2,813	100.0	100.0	38	100.0	100.0	13,739	100.0	3.8	22,942	100.0	85.2	13,957	100.0	81.6	10,586	100.0	82.3
NATURAL																								
Wildfires	17,970	100.0	12.0	267	22.2	2.2	1	100.0	0.0				760	0.2	0.2	3,025	75.8	11.2	2,313	73.4	13.5	2,135	93.6	16.6
Biogenics				936	77.8	7.7							346,003	99.7	95.9									
Wildlife													218	0.1	0.1									
Marine Aerosol																965	24.2	3.6	839	26.6	4.9	145	6.4	1.1
NATURAL SUB-TOTAL	17,970	100.0	12.0	1,203	100.0	9.8	1	100.0	0.0				346,981	100.0	96.2	3,990	100.0	14.8	3,152	100.0	18.4	2,280	100.0	17.7
TOTAL	149,514		100.0	12,227		100.0	2,814		100.0	38		100.0	360,720		100.0	26,932		100.0	17,109		100.0	12,866		100.0

ROAD DUST	Part	PM10	PM2.5
Paved	14,437	2,767	662
Unpaved	10,313	3,254	485

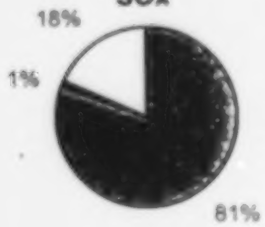
B.C. 1995 Emission Inventory - Cariboo (Region 5)


CO

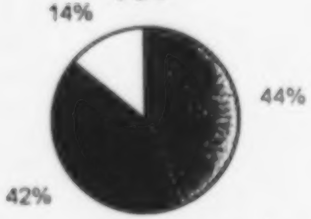
Total = 131,544 tonnes


NOx

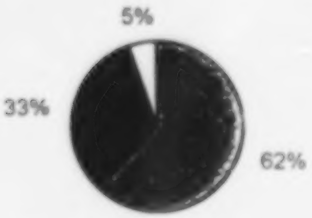
Total = 11,024 tonnes


SOx

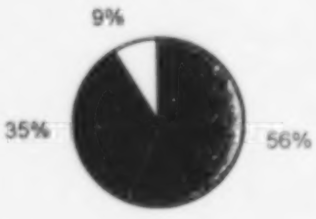
Total = 2,813 tonnes


VOC

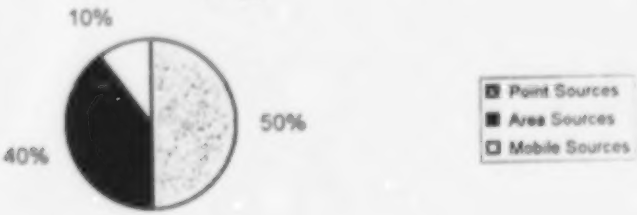
Total = 13,739 tonnes


Part

Total = 22,942 tonnes


PM_{10}

Total = 13,957 tonnes


$PM_{2.5}$

Total = 10,586 tonnes

Road dust and natural sources not included.

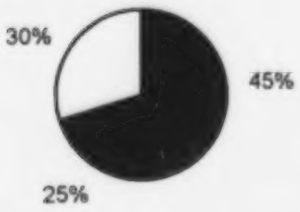
BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS - SKEENA (REGION 6)

SOURCE / Category	CO			NOx			SOx			TRS			VOC			Part			PM10			PM2.5		
	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total
ANTHROPOGENIC																								
Point Sources	43,568	45.6	17.1	4,260	15.1	12.8	7,579	51.8	51.8	170	100.0	100.0	3,754	30.5	0.7	16,780	69.3	32.3	11,255	67.4	29.6	8,632	64.2	26.6
Wood Products	34,350	35.9	13.5	365	1.3	1.1	44	0.3	0.3				2,987	24.3	0.5	7,459	30.8	14.3	3,948	23.7	10.4	2,684	20.0	8.3
Paper and Allied Products	3,880	4.1	1.5	404	1.4	1.2	3,742	25.6	25.6	170	100.0	100.0	137	1.1	0.0	4,185	17.3	8.1	3,679	22.0	9.7	2,988	22.2	9.2
Mining	363	0.4	0.1	1,671	5.9	5.0	1,803	12.3	12.3				114	0.9	0.0	787	3.2	1.5	202	1.2	0.5	168	1.3	0.5
Logging	4,461	4.7	1.8	34	0.1	0.1	3	0.0	0.0				378	3.1	0.1	952	3.9	1.8	901	5.4	2.4	884	6.6	2.7
Primary Metal Manufacturing	19	0.0	0.0	88	0.3	0.3	1,713	11.7	11.7				4	0.0	0.0	2,507	10.4	4.8	2,113	12.7	5.6	1,725	12.8	5.3
Refined Petroleum and Coal Products	15	0.0	0.0	20	0.1	0.1	71	0.5	0.5				10	0.1	0.0	167	0.7	0.3	32	0.2	0.1	6	0.0	0.0
Non-Metallic Mineral Products																3	0.0	0.0	1	0.0	0.0			
Pipeline Transport	100	0.1	0.0	251	0.9	0.8	1	0.0	0.0				52	0.4	0.0	12	0.0	0.0	12	0.1	0.0	12	0.1	0.0
Power Generation & Other Utility	250	0.3	0.1	1,009	3.6	3.0	199	1.4	1.4				46	0.4	0.0	97	0.4	0.2	84	0.5	0.2	74	0.6	0.2
Other	122	0.1	0.0	418	1.5	1.3	3	0.0	0.0				28	0.2	0.0	611	2.5	1.2	283	1.7	0.7	91	0.7	0.3
Area Sources	23,660	24.7	9.3	518	1.8	1.6	40	0.3	0.3				4,771	38.8	0.9	4,321	17.8	8.3	2,330	14.0	6.1	1,961	14.6	6.0
Prescribed burning	18,014	18.8	7.1	268	0.9	0.8	1	0.0	0.0				762	6.2	0.1	1,421	5.9	2.7	1,001	6.0	2.6	969	7.2	3.0
Space Heating	5,316	5.6	2.1	211	0.7	0.6	37	0.3	0.3				1,821	14.8	0.3	711	2.9	1.4	710	4.3	1.9	674	5.0	2.1
Agriculture				20	0.1	0.1							526	4.3	0.1	1,205	5.0	2.3	461	2.8	1.2	219	1.6	0.7
Oil and Gas	2	0.0	0.0	5	0.0	0.0							624	5.1	0.1	1	0.0	0.0	1	0.0	0.0	1	0.0	0.0
Solvent Evaporation													751	6.1	0.1									
Miscellaneous Burning	320	0.3	0.1	14	0.0	0.0	2	0.0	0.0				78	0.6	0.0	56	0.2	0.1	56	0.3	0.1	51	0.4	0.2
Other	8	0.0	0.0										208	1.7	0.0	927	3.8	1.8	101	0.6	0.3	47	0.3	0.1
Mobile Sources	28,373	29.7	11.1	23,418	83.1	70.3	7,007	47.9	47.9				3,780	30.7	0.7	3,117	12.9	6.0	3,108	18.6	8.2	2,843	21.2	8.7
Light-Duty Vehicles	22,513	23.5	8.8	1,718	6.1	5.2	66	0.5	0.5				2,288	18.6	0.4	37	0.2	0.1	38	0.2	0.1	23	0.2	0.1
Heavy-Duty Vehicles	1,306	1.4	0.5	1,308	4.6	3.9	23	0.2	0.2				210	1.7	0.0	99	0.4	0.2	90	0.6	0.3	87	0.6	0.3
Railways	612	0.6	0.2	3,292	11.7	9.9	231	1.6	1.6				174	1.4	0.0	2,033	8.4	3.9	2,033	12.2	5.3	1,871	13.9	5.8
Marine Vessels	1,958	2.0	0.8	16,505	58.5	49.6	6,673	45.6	45.6				924	7.5	0.2	874	3.6	1.7	874	5.2	2.3	804	6.0	2.5
Aircraft	673	0.7	0.3	47	0.2	0.1	4	0.0	0.0				58	0.5	0.0	18	0.1	0.0	10	0.1	0.0	7	0.1	0.0
Off-Road	1,313	1.4	0.5	548	1.9	1.6	10	0.1	0.1				128	1.0	0.0	56	0.2	0.1	56	0.3	0.1	51	0.4	0.2
ANTHROPOGENIC SUB-TOTAL	95,601	100.0	37.5	28,196	100.0	84.6	14,626	100.0	99.9	170	100.0	100.0	12,305	100.0	2.2	24,218	100.0	46.6	16,693	100.0	43.9	13,436	100.0	41.3
NATURAL																								
Wildfires	159,229	100.0	62.5	2,365	46.2	7.1	8	100.0	0.1				6,734	1.2	1.2	26,801	96.5	51.6	20,495	96.1	53.9	18,918	99.2	58.2
Biogenics				2,749	53.8	8.3							532,254	98.7	96.5									
Wildlife													218	0.0	0.0									
Marine Aerosol																965	3.5	1.9	839	3.9	2.2	145	0.8	0.4
NATURAL SUB-TOTAL	159,229	100.0	62.5	5,114	100.0	15.4	8	100.0	0.1				539,206	100.0	97.8	27,766	100.0	53.4	21,334	100.0	56.1	19,063	100.0	58.7
[illegible]																								
TOTAL	254,830		100.0	33,309		100.0	14,634		100.0	170		100.0	551,510		100.0	51,984		100.0	38,026		100.0	32,499		100.0

ROAD DUST	Part	PM10	PM2.5
Paved	24,537	4,703	1,125
Unpaved	[illegible]	[illegible]	701

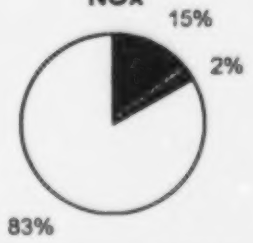
B.C. 1995 Emission Inventory - Skeena (Region 6)

CO



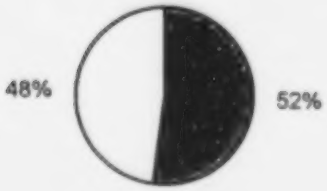
Total = 95,601 tonnes

NOx



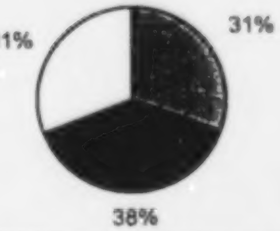
Total = 28,196 tonnes

SOx



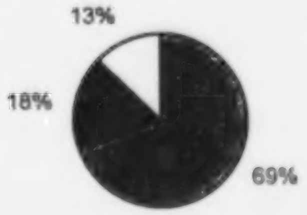
Total = 14,626 tonnes

VOC



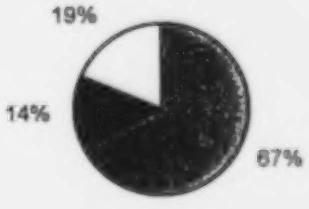
Total = 12,305 tonnes

Part



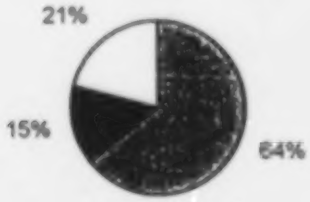
Total = 24,218 tonnes

PM_{10}



Total = 16,693 tonnes

$PM_{2.5}$



- ☐ Point Sources
- ■ Area Sources
- ☐ Mobile Sources

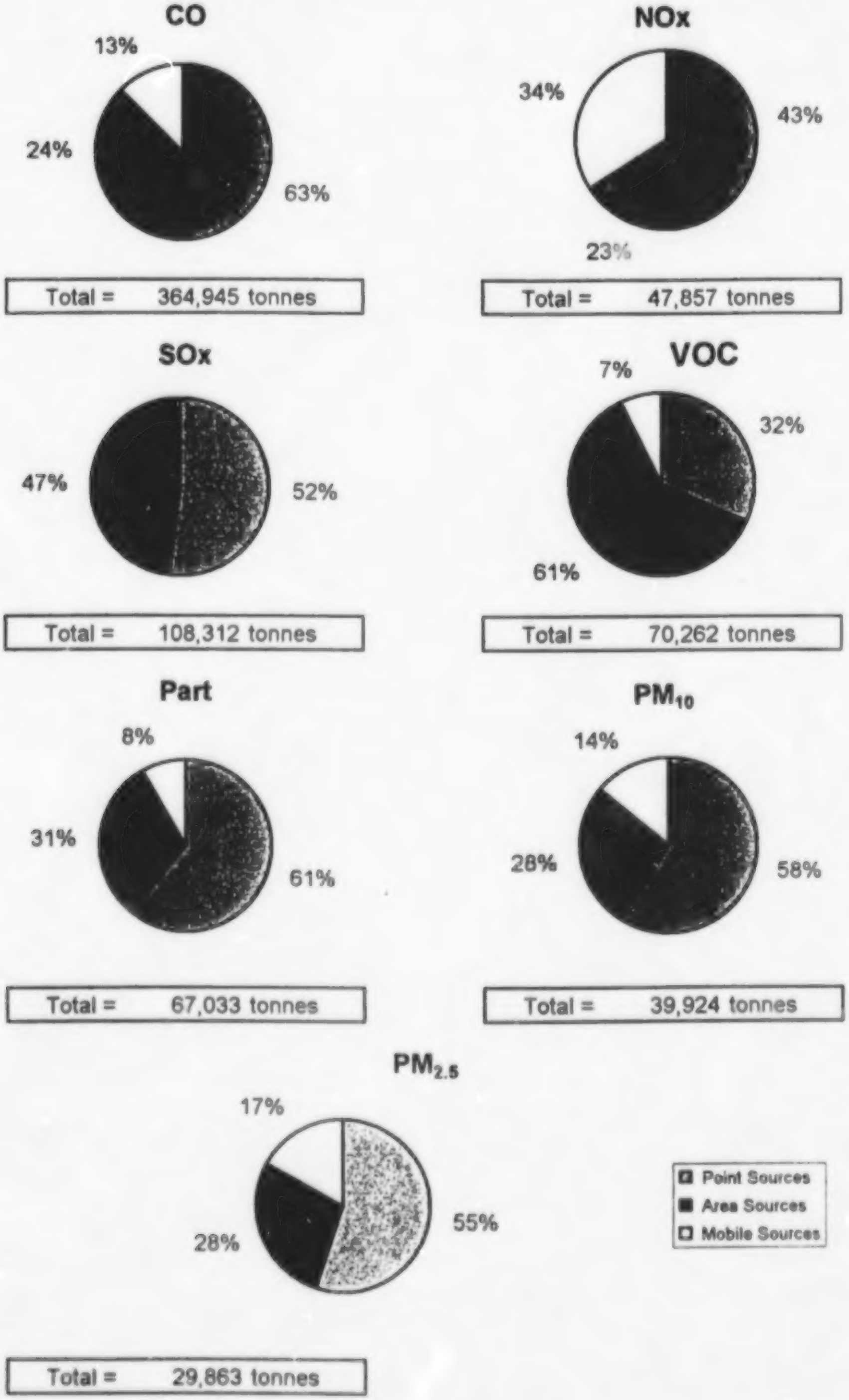
Total = 13,436 tonnes

Road dust and natural sources not included.

BRITISH COLUMBIA 1995 EMISSION INVENTORY SUMMARY OF EMISSIONS - OMINECA-PEACE (REGION 7)

SOURCE / Category	CO			NOx			SOx			TRS			VOC			Part			PM10			PM2.5		
	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total	(tonnes)	% of Sub-Total	% of Overall Total
ANTHROPOGENIC																								
Point Sources	230,874	63.3	52.1	20,592	43.0	39.8	56,283	52.0	52.0	284	23.8	23.8	22,319	31.8	2.6	40,805	60.9	50.9	23,407	58.6	46.8	16,404	54.9	41.9
Wood Products	202,207	55.4	45.6	2,546	5.3	4.9	249	0.2	0.2				17,771	25.3	2.1	35,437	52.9	44.2	19,090	47.8	38.2	13,128	44.0	33.5
Paper and Allied Products	18,213	5.0	4.1	1,972	4.1	3.8	1,533	1.4	1.4	153	12.8	12.8	940	1.3	0.1	3,322	5.0	4.1	2,820	7.1	5.6	2,267	7.6	5.8
Mining	378	0.1	0.1	2,197	4.6	4.2	870	0.8	0.8				441	0.6	0.1	978	1.5	1.2	713	1.8	1.4	347	1.2	0.9
Logging	2	0.0	0.0										1	0.0	0.0	3	0.0	0.0	1	0.0	0.0	1	0.0	0.0
Primary Metal Manufacturing	2	0.0	0.0										2	0.0	0.0	2	0.0	0.0	1	0.0	0.0			
Refined Petroleum and Coal Products	5,074	1.4	1.1	336	0.7	0.6	4,533	4.2	4.2				168	0.2	0.0	94	0.1	0.1	68	0.2	0.1	41	0.1	0.1
Non-Metallic Mineral Products																2	0.0	0.0	1	0.0	0.0			
Pipeline Transport	1,636	0.4	0.4	3,972	8.3	7.7	5	0.0	0.0	4	0.3	0.3	200	0.3	0.0	270	0.4	0.3	270	0.7	0.5	260	0.9	0.7
Power Generation & Other Utility	1,406	0.4	0.3	418	0.9	0.8	7	0.0	0.0				152	0.2	0.0	182	0.3	0.2	182	0.5	0.4	182	0.6	0.5
Crude Petroleum & Natural Gas Processing	1,906	0.5	0.4	8,934	18.7	17.3	48,642	44.9	44.9	126	10.5	10.5	2,306	3.3	0.3	206	0.3	0.3	203	0.5	0.4	162	0.5	0.4
Other	52	0.0	0.0	218	0.5	0.4	444	0.4	0.4	1	0.1	0.1	330	0.5	0.0	309	0.5	0.4	58	0.1	0.1	18	0.1	0.0
Area Sources	87,980	24.1	19.8	10,955	22.9	21.2	51,273	47.3	47.3	911	76.2	76.2	42,923	61.1	5.1	20,686	30.9	25.8	10,988	27.5	22.0	8,392	28.1	21.4
Prescribed burning	72,737	19.9	16.4	1,080	2.3	2.1	4	0.0	0.0				3,076	4.4	0.4	6,460	9.6	8.1	4,631	11.6	9.3	4,438	14.9	11.3
Space Heating	12,483	3.4	2.8	389	0.8	0.8	68	0.1	0.1				4,280	6.1	0.5	1,662	2.5	2.1	1,660	4.2	3.3	1,578	5.3	4.0
Agriculture				175	0.4	0.3							2,124	3.0	0.3	10,913	16.3	13.6	4,209	10.5	8.4	1,993	6.7	5.1
Oil and Gas	1,268	0.3	0.3	9,281	19.4	17.9	51,198	47.3	47.3	911	76.2	76.2	31,895	45.4	3.8	86	0.1	0.1	86	0.2	0.2	86	0.3	0.2
Solvent Evaporation													1,056	1.5	0.1									
Miscellaneous Burning	1,480	0.4	0.3	28	0.1	0.1	3	0.0	0.0				249	0.4	0.0	257	0.4	0.3	254	0.6	0.5	231	0.8	0.6
Other	12	0.0	0.0	2	0.0	0.0							243	0.3	0.0	1,308	2.0	1.6	148	0.4	0.3	70	0.2	0.2
Mobile Sources	46,091	12.6	10.4	16,310	34.1	31.5	756	0.7	0.7				5,020	7.1	0.6	5,542	8.3	6.9	5,531	13.9	11.1	5,067	17.0	12.9
Light-Duty Vehicles	31,647	8.7	7.1	2,415	5.0	4.7	93	0.1	0.1				3,218	4.6	0.4	52	0.1	0.1	50	0.1	0.1	32	0.1	0.1
Heavy-Duty Vehicles	1,836	0.5	0.4	1,838	3.8	3.6	32	0.0	0.0				295	0.4	0.0	139	0.2	0.2	139	0.3	0.3	123	0.4	0.3
Railways	1,477	0.4	0.3	7,949	16.6	15.4	557	0.5	0.5				420	0.6	0.0	4,909	7.3	6.1	4,909	12.3	9.8	4,516	15.1	11.5
Marine Vessels	312	0.1	0.1	5	0.0	0.0	1	0.0	0.0				102	0.1	0.0									
Aircraft	460	0.1	0.1	42	0.1	0.1	4	0.0	0.0				66	0.1	0.0	19	0.0	0.0	10	0.0	0.0	7	0.0	0.0
Off-Road	10,359	2.8	2.3	4,061	8.5	7.8	69	0.1	0.1				921	1.3	0.1	423	0.6	0.5	423	1.1	0.8	389	1.3	1.0
ANTHROPOGENIC SUB-TOTAL	364,945	100.0	82.3	47,857	100.0	92.5	108,312	100.0	100.0	1,195	100.0	100.0	70,262	100.0	8.3	67,033	100.0	83.6	39,924	100.0	79.8	29,863	100.0	76.2
NATURAL																								
Wildfires	78,306	100.0	17.7	1,163	29.8	2.2	4	100.0	0.0				3,311	0.4	0.4	13,180	100.0	16.4	10,079	100.0	20.2	9,304	100.0	23.8
Biogenics				2,745	70.2	5.3							770,381	99.5	91.2									
Wildlife													412	0.1	0.0									
NATURAL SUB-TOTAL	78,306	100.0	17.7	3,908	100.0	7.5	4	100.0	0.0				774,104	100.0	91.7	13,180	100.0	16.4	10,079	100.0	20.2	9,304	100.0	23.8
TOTAL	443,251		100.0	51,765		100.0	108,315		100.0	1,195		100.0	844,366		100.0	80,213		100.0	50,003		100.0	39,167		100.0
ROAD DUST																								
Paved																30,495			5,845			1,398		
Unpaved																22,163			7,036			1,043		

B.C. 1995 Emission Inventory - Omineca Peace (Region 7)



Road dust and natural sources not included.

APPENDIX B

Point Source Emissions

by

Standard Industrial Classification (SIC)

Point Source Emissions by Standard Industrial Classification (SIC), page 1 of 4

SIC	Description	Tonnes of Emissions							
		CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
162	Greenhouse Products	153.6	28.0	1.9		2.7	34.8	28.3	23.0
211	Veterinary Services	0.5	0.3	0.0		0.0	1.9	1.4	1.2
229	Other Services Incidental to Agricultural Crops						230.3	88.4	24.2
411	Logging Industry	23204.1	212.0	16.9		2034.4	4785.8	4520.3	4432.3
6	Mining Industries						17.3		
611	Gold Mines	540.2	1942.8	205.2		125.5	367.4	254.6	206.2
612	Copper and Copper-Zinc Mines	916.5	4025.7	393.1		279.0	1517.8	726.5	407.5
613	Nickel-Copper Mines	14.8	59.4	61.1	1.6	1.1	420.4	186.8	55.0
614	Silver-Lead-Zinc Mines	373.0	1717.5	132.1		117.1	141.0	130.1	115.9
615	Molybdenum Mines	0.1	0.8	1691.9		0.0	515.1	0.1	0.0
621	Asbestos Mines	1.3	6.0	0.4		0.4	0.4	0.4	0.4
623	Gypsum Mines						5.6	4.2	1.6
631	Bituminous Coal Mines	39.1	1787.8	2839.5		1142.6	2679.1	1998.5	809.9
711	Conventional Crude Oil & Natural Gas	1906.0	8934.0	48641.7	126.3	2305.8	206.2	203.2	162.2
811	Granite Quarries	0.1	0.3	0.0		0.0	8.7	3.3	1.1
812	Limestone Quarries						138.0	62.8	17.9
821	Sand and Gravel Pits	4.4	20.6	1.2		1.4	74.5	36.3	13.5
1011	Meat & Meat Products Industry (Except Poultry)	11.2	34.7	0.6		16.1	78.2	24.5	21.2
1012	Poultry Products Industry		0.0				0.1	0.0	0.0
1021	Fish Products Industry	1.3	5.6	0.1		0.2	19.9	2.1	1.0
1031	Canned & Preserved Fruit & Vegetable Industry	1.7	7.1	0.0		0.3	0.3	0.3	0.3
1032	Frozen Fruit & Vegetable Industry	0.2	1.0	0.0		0.1	0.1	0.1	0.1
1051	Cereal Grain Flour Industry						6.7	1.7	0.7
1052	Prepared Flour Mix & Cereal Industry						7.2	3.1	1.9
1053	Feed Industry	22.2	120.7	11.1		5.3	743.6	272.7	160.5
1081	Cane & Beet Sugar Industry	8.7	117.2	0.6		4.7	32.4	1.2	1.2
1091	Tea and Coffee Industry	0.8	4.5	0.1		0.7	33.9	1.0	0.5
1099	Other Food Products Industries	0.1	0.4	0.0		0.0	0.1	0.1	0.1
1121	Distillery Products Industry	3.6	48.4	0.1		0.2	0.6	0.2	0.1
1131	Brewery Products Industry	35.7	172.4	1.4		27.7	37.6	14.4	8.9
1599	Other Rubber Products Industries	0.3	1.6	19.2		11.1	75.7	17.0	12.5
1611	Foamed and Expanded Plastic Products Industries	0.0	0.2	0.0		52.9	12.0	2.1	1.5
1621	Plastic Pipe & Fittings Industry					1.2	12.9	0.7	0.5
1691	Plastic Bag Industry	0.2	0.8	0.0		414.5	5.6	0.1	0.1
1699	Other Plastic Products Industries n.e.c.	0.0	0.1			63.8	417.7	180.4	122.1
2511	Shingle and Shake Industry	2259.0	22.3	2.0		206.0	556.2	317.8	219.1
2512	Sawmill & Planing Mill Products Industry	378307.4	6104.4	474.8		33482.2	72601.1	38963.7	26456.5
2521	Hardwood Veneer & Plywood Industry	0.0	0.0	0.0		0.0	0.0	0.0	0.0
2522	Softwood Veneer and Plywood Industry	12138.8	288.2	20.2		1237.4	3927.4	2005.8	1253.5

Point Source Emissions by Standard Industrial Classification (SIC), page 2 of 4

SIC	Description	Tonnes of Emissions							
		CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
2541	Prefabricated Wooden Buildings Industry	52.6	2.7	0.2		5.8	53.2	23.6	12.7
2542	Prefabricated Wooden Buildings Industry					8.7	3.9		
2543	Wooden Door and Window Industry	37.6	2.1	0.2		88.1	94.6	38.3	19.7
2549	Other Millwork Industries	71.8	83.4	0.9		22.2	311.2	135.9	72.1
2561	Wooden Box and Pallet Industry						74.9	29.9	15.0
2591	Wood Preservation Industry	274.2	24.8	0.4		24.0	35.7	19.2	13.7
2592	Particle Board Industry	554.4	59.1	5.4		240.8	1349.6	549.0	326.0
2593	Wafer Board Industry	6845.8	179.0	38.9		68.7	527.2	295.6	121.4
2599	Other Wood Industries n.e.c.	923.7	44.0	1.1		80.0	181.4	96.1	67.9
2611	Wooden Household Furniture Industry	96.1	5.3	0.6		267.6	126.1	53.8	30.4
2692	Hotel, Restaurant & Institutional Furnature & Fixture Industry	0.1	0.4	0.0		9.6	3.9	1.9	0.3
2711	Pulp Industry	78022.3	11023.7	12427.4	1237.5	4028.5	22544.2	17751.7	13872.9
2712	Newsprint Industry	24488.2	6881.0	2189.5	206.7	1500.4	2306.6	1924.2	1524.6
2719	Other Paper Industries	264.9	158.6	3.7		8.0	257.7	46.1	41.0
2721	Asphalt Roofing Industry	0.1	0.9	0.0		0.2	0.9	0.8	0.7
2731	Folding Carton & Set-Up Box Industry	1.3	16.0	0.8		0.6	43.8	0.2	0.2
2732	Corrugated Box Industry	12.8	51.5	2.4		6.4	1700.3	811.1	611.2
2791	Coated & Treated Paper Industry	0.1	0.3			17.7	0.3	0.0	0.0
2819	Other Commercial Printing Industries	0.1	6.3	0.1		56.2	19.3	8.3	8.2
2911	Ferro-alloys Industry	0.2	0.6	0.0		3.2	9.6	9.0	9.0
2912	Steel Foundries	1.4	12.7	2.6		31.5	118.9	57.4	42.6
2941	Iron Foundries	377.4	27.8	3.3		17.0	247.7	88.6	103.7
2951	Primary Production of Aluminum Industry	21.0	88.3	1713.3		6.1	2508.7	2113.7	1725.1
2959	Other Primary Smelting and Refining of Non-Ferrous Metal Industrie	0.3	2.0	15141.1		34.4	1926.9	1534.8	1298.9
2961	Aluminum Rolling, Casting and Extruding Industry		0.5				3.4	3.4	3.3
2999	Other Rolled, Cast & Extruded Non-Ferrous Metal Products Industries	0.1	0.6	0.0		1.6	14.4	9.7	6.7
3029	Other Fabricated Structural Metal Products Industries	0.6	7.6	0.0		9.2	12.4	0.3	0.3
3031	Metal Door and Window Industry	0.2	0.9	0.2		52.6	0.3	0.2	0.1
3041	Custom Coating of Metal Products Industry	0.4	1.7	0.1		129.3	36.9	15.5	8.8
3042	Metal Closure & Container Industry	0.7	3.4	0.0		81.3	28.4	0.4	0.4
3051	Upholstery & Coil Spring Industry	0.2	1.1			2.2	6.6	0.1	0.1
3052	Wire and Wire Rope Industry	3.7	116.9	0.4		70.4	22.4	5.4	5.4
3061	Basic Hardware Industry	0.2	1.2	0.0		15.3	20.2	0.1	0.1
3099	Other Metal Fabricating Industries	0.2	0.9			0.1	11.3	0.5	0.5
3211	Agriculture Implement Industry	4.3	28.6	16.8		57.1	97.4	28.5	17.9
3241	Truck and Bus Body Industry	33.8	155.5	10.3		10.6	11.1	11.1	10.4
3242	Commercial Trailer Industry					7.2	0.3	0.1	0.1
3243	Non-commercial Trailer Industry					22.8	36.4	14.0	10.0
3255	Motor Vehicle Wheel and Brake Industry	0.7	3.5	0.6		85.6	4.6	2.3	1.4

Point Source Emissions by Standard Industrial Classification (SIC), page 3 of 4

SIC	Description	Tonnes of Emissions							
		CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
3256	Plastic Parts and Accessories for Motor Vehicles Industry								
3271	Shipbuilding and Repair Industry	12.4	0.1	0.0		75.8	3.2	3.1	3.1
3281	Boatbuilding and Repair Industry	0.1	0.4	0.0		0.0	4.2	0.0	0.0
3351	Telecommunication Equipment Industry					2.5	4.0		
3352	Electric Parts and Components Industry								
3359	Other Communication and Electronic Equipment Industries		0.2	0.1		0.0	0.0	0.0	0.0
3371	Electrical Transformer Industry					0.0	2.8	1.3	0.8
3379	Other Electrical Industrial Equipment Industries		0.8	0.5		2.2	0.8	0.4	0.3
3391	Battery Industry	1.3	5.3	0.1		20.8	1.8	0.5	0.5
3511	Clay Products Industry	5.0	25.0	0.3		1.5	228.8	138.8	54.3
3521	Hydraulic Cement Industry	145.3	5750.6	1108.9		21.8	1135.1	647.9	270.5
3541	Concrete Pipe Industry								
3542	Structural Concrete Products Industry	0.7	3.3	0.0		0.1	5.5	1.0	0.5
3549	Other Concrete Products Industry	0.5	2.3	2.4		0.1	8.9	1.9	0.6
3551	Ready-Mix Concrete Industry	10.0	49.8	0.9		2.5	212.8	88.0	26.7
3561	Primary Glass & Glass Containers		372.6	298.6		45.9	71.5	67.9	65.1
3571	Abrasives Industry						130.8		
3581	Lime Industry	39.4	189.2	1.5		8.9	205.5	37.4	17.9
3592	Asbestos Products Industry	0.3	0.8	0.0		0.1	8.3	4.6	2.8
3593	Gypsum Products Industry	13.6	54.2	1.0		1.1	52.8	31.5	12.8
3594	Non-Metallic Mineral Insulating Materials Industries	0.1	0.2	0.0		0.0	2.8		
3599	Other Non-Metallic Mineral Products Industries	11.3	56.4	1.7		3.0	157.5	124.4	113.5
3611	Refined Petroleum Products Industry (Except Lubricating Oil and Gr	5213.0	900.1	6763.8		977.2	326.7	235.0	144.3
3612	Lubricating Oil and Grease Industry	2.9	16.5	15.2		1.1	3.0	1.4	0.7
3699	Other Petroleum & Coal Products Industry	544.9	1497.7	1694.1		279.9	2045.2	438.3	140.7
3711	Industrial Inorganic Chemical Industries	26.3	353.4	316.4	0.8	4.0	18.3	8.1	5.9
3712	Industrial Organic Chemical Industries	83.6	416.5	2.4		22.8	13.3	8.3	6.0
3721	Chemical Fertilizer & Fertilizer Materials Industry	292.0	100.4	0.8		28.2	459.8	280.1	173.8
3722	Mixed Fertilizer Industry						0.8		
3731	Plastic & Synthetic Resin Industry	4.8	20.9	3.9		8.3	2.6	1.4	1.2
3741	Pharmaceutical and Medicine Industry	0.0	0.2			1.4	0.1	0.0	0.0
3751	Paint and Varnish Industry					201.6	14.6	6.1	2.1
3799	Other Chemical Products Industries n.e.c	0.3	1.1	7.9		0.0	3.5	0.1	0.0
3912	Other Instruments and Related Products Industry					0.1	0.4		
3922	Precious Metal Secondary Refining Industry	0.0	1.1				2.1		
3971	Sign and Display Industry								
4121	Highways, Streets and Bridges	50.9	179.3	213.0		21.5	312.1	55.1	13.4
4123	Hydroelectric Power Plants	3.0	13.7	0.9		0.9	1.0	1.0	0.9
4214	Excavating and Grading	873.8	6.7	0.7		73.9	215.1	215.1	215.1

Point Source Emissions by Standard Industrial Classification (SIC), page 4 of 4

SIC	Description	Tonnes of Emissions							
		CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
4531	Railway Transport Industry					0.6			
4551	Marine Cargo Handling Industry		0.2			1.4	3073.5	1384.7	416.4
4611	Natural Gas Pipeline Transport Industry	3386.2	5587.1	11.0	3.7	1172.4	535.7	535.7	525.2
4612	Crude Oil Pipeline Transport Industry	64.9	314.7	0.2		9.4	5.0	4.9	4.9
4711	Grain Elevator Industry	6.4	30.5	0.7		1.6	1042.1	248.9	80.9
4799	Other Storage and Warehousing Ind.						0.5	0.3	0.2
4911	Electric Power Systems Industry	6851.1	4172.3	369.2		572.8	528.3	454.2	426.9
4921	Gas Distribution Systems Industry		0.0						
4999	Other Utility Industries	1392.6	503.8	130.8		126.9	374.9	346.7	337.7
5111	Petroleum Products, Wholesale	0.1	0.2	1.6		313.4	0.0	0.0	0.0
5613	Non-Ferrous Metal and Metal Products, Wholesale	26.1	0.4	0.1		2.2	8.9	8.9	8.9
5639	Other Building Materials, Wholesale						3.5	1.7	0.8
5721	Construction & Forestry Machinery, Equipment & Supplies Wholesale					0.4	7.1	3.3	2.1
5911	Automobile Wrecking						16.7		
5919	Other Waste Materials, Wholesale	3.7	16.2	5.0		30.0	28.5	4.4	3.6
5971	Industrial and Household Chemicals, Wholesale		0.2			7.8	0.2	0.2	0.1
6331	Gasoline Service Stations					4.8			
6352	Paint and Body Repair Shops	0.1	0.6	0.0		2.0	8.1	5.3	2.4
7759	Other Scientific and Technical Services	0.1	0.5	0.0		0.6	12.2	0.2	0.1
8521	Post-Secondary Non-University Education	9.3	0.1	0.0		2.7	0.4	0.2	0.1
8611	General Hospitals	2.1	1.5	0.6		0.5	0.9	0.7	0.6
8681	Medical Laboratories	0.1	0.2			0.1	2.5	0.0	0.0
9111	Hotels and Motor Hotels	0.1	0.5	0.0		0.0	0.1	0.1	0.1
9149	Other Recreation and Vacation Camps	0.8	0.4	1.3		0.3	0.6	0.3	0.3
9699	Other Amusement and Recreational Services	0.1	0.1	0.0		0.1	0.9	0.3	0.2
9721	Power Laundries and/or Dry Cleaners	0.7	3.4	0.1		3.7	8.2	0.9	0.7
9941	Electric Motor Repair	0.1	0.4	0.1		9.5	4.7	0.1	0.1
	Totals =	551116.3	65309.5	97031.6	1576.5	52675.8	135784.8	81135.8	57602.7

Note: True zero values have been removed for clarity.
Values shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions are subject to rounding errors, which may result in slight differences between totals.

APPENDIX C

Point Source Emissions by Source

Point Source Emissions by Source (page 1 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
1	1481	BHP MINERALS CANADA LTD.	RUPERT INLET	0.1	0.4	116.4		0.0	242.8	111.4	32.7
1	1863	MACMILLAN BLOEDEL LIMITED	PORT ALBERNI	1400.5	233.4	618.5	117.1		1424.0	604.0	173.8
1	1872	TIMBERWEST FOREST LIMITED	YOUBOU	1.1	5.2	0.0		0.3	35.9	0.2	0.2
1	1878	VICTORIA PLYWOOD COOPERATIVE	VICTORIA	229.7	6.5	1.4		20.1	274.0	170.6	120.9
1	1902	FLETCHER CHALLENGE CANADA LIMITED	CROFTON	5805.7	1090.5	527.1	60.5	326.0	1117.0	1054.8	947.2
1	2110	CANADIANOXY INDUSTRIAL CHEMICALS LIMITED	NANAIMO-DUKE POINT	2.3	9.4	67.2		0.1	0.9	0.5	0.1
1	2200	BUCKERFIELD'S LIMITED	DUNCAN	0.9	18.3	8.5		0.0	28.6	11.8	5.4
1	2245	PACIFIC FOREST PRODUCTS LIMITED	TAHSIS						185.7	74.3	37.1
1	2408	WESTMIN RESOURCES LIMITED	BUTTLE LAKE	875.4	4025.0	267.8		275.5	448.1	314.6	278.6
1	2472	VICTORIA FOUNDRIES LTD.	VICTORIA	0.2	1.1	0.0		0.1	30.5	30.5	30.5
1	2558	RAVEN LUMBER LIMITED	CAMPBELL RIVER						35.0	14.0	7.0
1	2677	DUNCAN PAVING LTD.	DUNCAN	0.8	0.7	5.8		0.6	16.8	2.4	0.1
1	2696	MACMILLAN BLOEDEL LIMITED	PORT ALBERNI-ALBERNI PACIFIC					2.9	315.0	120.9	60.5
1	2708	HARMAC PACIFIC INC.	HARMAC	6299.3	471.3	1257.2	43.0	308.8	1970.8	1830.4	1524.6
1	2768	ISLAND ASPHALT LTD.	VICTORIA	0.5	0.4	0.1		0.3	28.0	4.0	0.2
1	2786	IMPERIAL OIL, A PARTNERSHIP OF IMPERIAL LIMI	ESQUIMALT	0.1	0.2	1.6		0.0	0.0	0.0	0.0
1	2800	WESCRAFT MANUFACTURING LIMITED	CENTRAL SAANICH	0.0	0.0	0.2		0.0	0.2	0.1	0.0
1	2801	HUB CITY PAVING LTD.	CASSIDY	1.5	2.6	10.4		0.9	58.9	8.4	0.6
1	2844	COWICHAN VALLEY REGIONAL DISTRICT	VILLAGE OF LAKE COWICHAN	47.0	4.0	3.3		2.0	40.3	29.7	25.3
1	2853	MAYO FOREST PRODUCTS LTD.	NANAIMO						15.4	6.1	3.1
1	2950	TIMBERWEST FOREST LIMITED	JACKSON BAY	146.9	1.1	0.1		12.4	36.2	36.2	36.2
1	2960	CLAGUE, BRUCE	COURTENAY						0.1	0.0	0.0
1	3011	EVANS REDI-MIX LTD.	DUNCAN	0.0	0.1	0.5		0.0	0.1	0.1	0.1
1	3051	MACMILLAN BLOEDEL LIMITED	PORT ALBERNI-SOMASS MILL					44.0	458.5	199.1	86.3
1	3076	ISLAND ASPHALT LTD.	METCHOSIN	0.9	0.9	2.2		0.6	3.5	0.5	0.0
1	3086	OSBORNE CONTRACTING LIMITED	DUNCAN	0.1	0.3	2.4		0.0	0.0	0.0	0.0
1	3120	MACMILLAN BLOEDEL LIMITED	NANAIMO						219.7	82.5	41.2
1	3201	CANADIAN PACIFIC FOREST PRODUCTS LIMITED	GOLD RIVER	2643.9	302.2	50.6	150.4	185.9	1831.0	1566.5	1239.8
1	3341	FLETCHER CHALLENGE CANADA LIMITED	ELK FALLS	11270.4	1332.8	75.5	387.5	808.5	1889.7	1264.0	930.8
1	3631	PET PALACE KENNELS INC.	VICTORIA						0.3	0.2	0.2
1	3760	WESTERN PULP LIMITED PARTNERSHIP	PORT ALICE	1839.2	957.4	1840.0		72.7	1347.5	1157.3	972.1
1	3822	TOP SHELF FEEDS INC.	DUNCAN	0.2	0.8	1.8		0.0	58.2	16.7	1.6
1	3877	PACIFIC FOREST PRODUCTS LIMITED	LADYSMITH						66.3	26.5	13.3
1	3956	TAYCO PAVING CO. LTD.	CUMBERLAND	0.5	0.5	3.8		0.4	17.2	2.4	0.1
1	3984	TAYCO PAVING CO. LTD.	CAMPBELL RIVER	0.5	0.4	3.5		0.3	17.8	2.5	0.1
1	4005	MACMILLAN BLOEDEL LIMITED	PORT MCNEILL	195.0	1.5	0.2		16.5	48.0	48.0	48.0
1	4166	DOMAN FOREST PRODUCTS LIMITED	CHEMAINUS						29.1	11.7	5.8
1	4190	O.K. PAVING COMPANY	NEAR PORT MCNEILL	0.1	0.1	1.0		0.1	0.5	0.1	0.0
1	4251	CONSTRUCTION AGGREGATES LTD.	METCHOSIN						40.8	34.6	12.2
1	4396	DOMAN FOREST PRODUCTS LIMITED	COWICHAN BAY						67.0	26.8	13.4
1	4467	MACMILLAN BLOEDEL LIMITED	MENZIES BAY	182.0	1.4	0.1		15.4	44.8	44.8	44.8
1	4581	BUTLER BROTHERS SUPPLIES LTD.	VICTORIA						8.1	4.2	1.2
1	4619	MACMILLAN BLOEDEL LIMITED	GREAT CENTRAL LAKE	312.0	2.4	0.2		26.4	76.8	76.8	76.8
1	4642	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	KEOGH RIVER	4.5	16.8	40.7		1.4	1.5	0.7	0.2
1	4784	MACMILLAN BLOEDEL LIMITED	EVE RIVER DIVISION	187.2	1.4	0.1		15.8	46.1	46.1	46.1
1	4853	NANAIMO CONCRETE LTD.	NANAIMO						0.0	0.0	0.0
1	4926	WELDWOOD OF CANADA LIMITED	THOMPSON SOUND	31.2	0.2	0.0		2.6	7.7	7.7	7.7
1	5116	COWICHAN VALLEY REGIONAL DISTRICT	DUNCAN						13.6	10.0	8.5
1	5118	COWICHAN VALLEY REGIONAL DISTRICT	LADYSMITH	21.3	6.4	5.1		6.4	6.5	4.8	4.1
1	5263	CANADIAN FOREST PRODUCTS LIMITED	BEAVER COVE	2990.0	23.0	2.3		253.0	736.0	736.0	736.0
1	5277	MACMILLAN BLOEDEL LIMITED	NOOTKA ISLAND	104.0	0.8	0.1		8.8	25.6	25.6	25.6
1	5280	HIGHWEST WASTE RECYCLER LIMITED	VICTORIA-MILLSTREAM ROAD	585.0	4.5	0.5		49.5	144.0	144.0	144.0

Point Source Emissions by Source (page 2 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
1	5411	PACIFIC FOREST PRODUCTS LIMITED	MCCURDY CREEK	104.0	0.8	0.1		8.8	25.6	25.6	25.6
1	5430	PACIFIC FOREST PRODUCTS LIMITED	TSOWWIN RIVER	130.0	1.0	0.1		11.0	32.0	32.0	32.0
1	5557	MACMILLAN BLOEDEL LIMITED	SARITA	1040.0	8.0	0.8		88.0	256.0	256.0	256.0
1	5601	TILBURY CEMENT LIMITED	MILL BAY						15.4	10.7	3.6
1	5701	ALBERNI FOUNDRY LTD.	PORT ALBERNI						1.0	0.0	0.2
1	5883	TAYCO PAVING CO. LTD.	MOBILE M8025	1.6	6.4	2.6		0.6	16.0	3.6	0.9
1	6016	INTERNATIONAL FOREST PRODUCTS LIMITED	BEAR BIGHT	156.0	1.2	0.1		13.2	38.4	38.4	38.4
1	6081	CAPITAL CITY PAVING LTD.	MOBILE	2.2	2.1	3.4		1.6	29.8	4.2	0.2
1	6187	G.L. HARPER SCRAP METAL AND DEMO. LIMITED	DUNCAN	0.2	0.0	0.0		0.2	0.5	0.5	0.5
1	6215	BHP MINERALS CANADA LTD.	RUPERT INLET	41.1	0.3	0.0		3.5	10.1	10.1	10.1
1	6270	QUENCO CEDAR INDUSTRIES LTD.	LAKE COWICHAN	93.6	0.7	0.1		7.9	23.0	12.7	9.2
1	6307	CONFEDERATE SHAKE AND SHINGLE LTD.	COWICHAN LAKE	14.1	0.1	0.0		1.2	1.5	0.8	0.6
1	6310	INTERNATIONAL FOREST PRODUCTS LIMITED	KINGCOME INLET	93.6	0.7	0.1		7.9	23.0	23.0	23.0
1	6336	ISLAND ASPHALT LTD.	MOBILE	0.4	1.4	1.2		0.2	3.0	0.7	0.2
1	6471	HAYLOCK BROS. PAVING LTD.	ERRINGTON	0.6	0.6	4.9		0.5	9.9	1.4	0.1
1	6626	PACIFIC FOREST PRODUCTS LIMITED	ESPINOSA INLET	13.5	0.1	0.0		1.1	3.3	3.3	3.3
1	6857	INTERNATIONAL FOREST PRODUCTS LIMITED	CLEAGH CREEK	133.1	1.0	0.1		11.3	32.8	32.8	32.8
1	6967	WESTERN FOREST PRODUCTS LIMITED	NAKA CREEK	195.0	1.5	0.2		16.5	48.0	48.0	48.0
1	7054	THE CORPORATION OF THE CITY OF VICTORIA	VICTORIA	0.5	0.4	0.7		0.3			
1	7055	PACIFIC FOREST PRODUCTS LIMITED	BRYN-NEAR NANOOSE BAY	0.1	0.2	6.3	0.0	0.0	1.4	0.7	0.4
1	7107	INTERNATIONAL FOREST PRODUCTS LIMITED	SCOTT COVE ON GILFORD ISLAND	260.0	2.0	0.2		22.0	64.0	64.0	64.0
1	7149	MACMILLAN BLOEDEL LIMITED	CHEMAINUS						36.6	14.6	7.3
1	7217	MILL & TIMBER PRODUCTS LTD.	MACGOWAN BAY	31.2	0.2	0.0		2.6	7.7	7.7	7.7
1	7393	ISLAND READY-MIX LTD.	CAMPBELL RIVER						0.0	0.0	0.0
1	7395	TIMBERWEST FOREST LIMITED	CALL INLET	104.0	0.8	0.1		8.8	25.6	25.6	25.6
1	7454	SHUSHARTIE LOGS SALES LTD.	PORT HARDY	2.7	0.0	0.0		0.2	0.7	0.7	0.7
1	7492	PACIFIC FOREST PRODUCTS LIMITED	WEST TAHSIS	52.0	0.4	0.0		4.4	12.8	12.8	12.8
1	7561	PACIFIC FOREST PRODUCTS LIMITED	KENDRICK ARM/NOOTKA ISLAND	104.0	0.8	0.1		8.8	25.6	25.6	25.6
1	7600	INTERNATIONAL FOREST PRODUCTS LIMITED	WAKEMAN SOUND	31.2	0.2	0.0		2.6	7.7	7.7	7.7
1	7605	DOMAN FOREST PRODUCTS LIMITED	LADYSMITH						31.0	12.4	6.2
1	7608	INTERNATIONAL FOREST PRODUCTS LIMITED	TLUPANA INLET	36.4	0.3	0.0		3.1	9.0	9.0	9.0
1	7691	WESTERN FOREST PRODUCTS LIMITED	PORT MCNEILL	571.2	4.4	0.4		48.3	140.6	140.6	140.6
1	7699	INTERNATIONAL FOREST PRODUCTS LIMITED	KNIGHT INLET	93.6	0.7	0.1		7.9	23.0	23.0	23.0
1	7730	A. TRACE AND SONS LTD.	CAMPBELL RIVER	104.0	0.8	0.1		8.8	25.6	25.6	25.6
1	7739	PACIFIC FOREST PRODUCTS LIMITED	SOOKE	234.0	1.8	0.2		19.8	57.6	57.6	57.6
1	7755	WELDWOOD OF CANADA LIMITED	ELK BAY	124.8	1.0	0.1		10.6	30.7	30.7	30.7
1	7757	PACIFIC FOREST PRODUCTS LIMITED	KLEEPTEE CREEK	5.2	0.0	0.0		0.4	1.3	1.3	1.3
1	7759	PRIMEX FOREST PRODUCTS LTD.	COURTENAY						76.8	30.7	15.4
1	7800	INTERNATIONAL FOREST PRODUCTS LIMITED	MOOYAH BAY	124.8	1.0	0.1		10.6	30.7	30.7	30.7
1	7801	COULSON FOREST PRODUCTS LIMITED	TOQUART BAY	260.0	2.0	0.2		22.0	64.0	64.0	64.0
1	7809	SEASTAR CHEMICALS INC.	SIDNEY								
1	7935	HATHAWAY ENTERPRISES LTD.	SOOKE ROAD	4.7	0.0	0.0		0.4	1.2	1.2	1.2
1	7937	PAULCAN ENTERPRISES LTD.	CHEMAINUS						29.8	11.9	6.0
1	7939	SALT SPRING AQUAFARMS LTD.	SALTSPRING ISLAND, CHINA COVE								
1	7979	PACIFIC FOREST PRODUCTS LIMITED	HOUSTON RIVER	161.2	1.2	0.1		13.6	39.7	39.7	39.7
1	8003	DOMAN FOREST PRODUCTS LIMITED	NANAIMO-DUKE POINT						81.2	30.0	15.0
1	8018	WHITE CREST MILLS INC.	CAMPBELL RIVER						1.1	0.5	0.1
1	8123	TIMBERWEST FOREST LIMITED	KELSEY BAY	104.0	0.8	0.1		8.8	25.6	25.6	25.6
1	8125	THE HESQUIAHT INDIAN BAND	HOT SPRINGS COVE	0.0	0.1	0.0		0.0	0.8	0.3	0.2
1	8150	PACIFIC FOREST PRODUCTS LIMITED	KENDRICK INLET	145.6	1.1	0.1		12.3	35.8	35.8	35.8
1	8155	COLUMBIA READY-MIX LTD.	860 ATREE ROAD, VICTORIA						0.9	0.5	0.2
1	8192	SOOKE MARINE INDUSTRIES LTD.	SOOKE								

Point Source Emissions by Source (page 3 of 25)

Reg.	Permit	Company	Location	CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
				Tonnes of Emissions							
1	8240	INTERNATIONAL FOREST PRODUCTS LIMITED	MEREWORTH SOUND	104.0	0.8	0.1		8.8	25.6	25.6	25.6
1	8244	HOLLAND, H. A.	CAMPBELL RIVER - 25 KM NORTH	2.3	0.0	0.0		0.2	0.6	0.6	0.6
1	8270	CANADIAN PACIFIC FOREST PRODUCTS LIMITED	NOOTKA SOUND	161.2	1.2	0.1		13.6	39.7	39.7	39.7
1	8278	MACMILLAN BLOEDEL LIMITED	LOT 1428, SAYWARD LAND DISTRICT	147.6	1.1	0.1		12.5	15.9	15.9	15.9
1	8378	TIMBERWEST FOREST LIMITED	BROOKS BAY, CORDERO CHANNEL	65.0	0.5	0.1		5.5	16.0	16.0	16.0
1	8392	TIMBERWEST FOREST LIMITED	KNOX BAY, WEST THURLOW ISLAND	104.0	0.8	0.1		8.8	25.6	25.6	25.6
1	8395	TIMBERWEST FOREST LIMITED	SOUTH KANISH BAY, QUADRA ISLAND	31.2	0.2	0.0		2.6	7.7	7.7	7.7
1	8398	TIMBERWEST FOREST LIMITED	WOODS BAY, OKISOLLO CHANNEL, SONORA ISLAN	65.0	0.5	0.1		5.5	16.0	16.0	16.0
1	8405	PACIFIC FOREST PRODUCTS LIMITED	HEAD BAY	146.9	1.1	0.1		12.4	36.2	36.2	36.2
1	8492	INTERNATIONAL FOREST PRODUCTS LIMITED	CHAMISS BAY	156.0	1.2	0.1		13.2	38.4	38.4	38.4
1	8499	TIMBERWEST FOREST LIMITED	BARNES BAY, SONORA ISLAND	5.2	0.0	0.0		0.4	1.3	1.3	1.3
1	8534	C AND C LATH MILL LTD.	3001 ALLENBY ROAD, DUNCAN						35.9	14.3	7.2
1	8535	UPLAND READY MIX LTD.	1920 ANTONELLI ROAD, CAMPBELL RIVER						2.2	1.1	0.3
1	8596	DUNCAN ELECTRIC MOTOR LTD.	DUNCAN	0.0	0.1	0.0		0.3	0.1	0.0	0.0
1	8661	ADWOOD MANUFACTURING LTD.	3107 AND3129 HENRY ROAD, CHEMAINUS, B.C.	0.5	2.6	0.0		0.5	24.2	10.7	5.4
1	8663	PACIFIC FOREST PRODUCTS LIMITED	NESOOK BAY	260.0	2.0	0.2		22.0	64.0	64.0	64.0
1	8830	NATIONAL SILICATES LIMITED/ SILICATES NATION	HERRING GULL ROAD, CITY OF PARKSVILLE	0.3	1.6	0.0		0.1	0.1	0.1	0.1
1	8833	I & J LOGGING LTD.	CAMPBELL RIVER	35.5	0.3	0.0		3.0	24.2	10.2	5.6
1	8839	R AND E PAVING LTD.	7 KM FROM PORT ALBERNI TOWARDS BAMFIELD	1.8	7.8	6.2		0.5	52.7	7.9	0.9
1	8875	MILL & TIMBER PRODUCTS LTD.	SARGEAUNT PASSAGE, KNIGHT INLET	150.8	1.2	0.1		12.8	37.1	37.1	37.1
1	8933	CALLANDER CEDAR PRODUCTS	MESACHIE LAKE	3.0	0.0	0.0		0.3	0.7	0.7	0.7
1	8937	MACMILLAN BLOEDEL LIMITED	CYPRESS BAY, CLAYOQOT DISTRICT	260.0	2.0	0.2		22.0	64.0	64.0	64.0
1	8946	DOMAN INDUSTRIES LIMITED	ESPERANZA INLET, NOOTKA ISLAND	187.2	1.4	0.1		15.8	46.1	46.1	46.1
1	9004	CANADIAN FOREST PRODUCTS LIMITED	BEAVER COVE	104.0	0.8	0.1		8.8	25.6	25.6	25.6
1	9006	O.K. INDUSTRIES LTD	GOLD RIVER	0.1	0.1	0.1		0.1	4.9	0.7	0.0
1	9082	CHEMAINUS FOREST PRODUCTS LTD	9341 TRANS CANADA HIGHWAY, CHEMAINUS						11.7	4.7	2.3
1	10699	DUBOIS ENTERPRISES	HYACINTHE BAY, QUADRA ISLAND	5.2	0.0	0.0		0.4	1.3	1.3	1.3
1	10837	PLENK'S WOOD CENTRE LTD	CHEMAINUS, B.C.	30.7	0.9	0.2		2.2	9.9	6.3	4.6
1	10859	TIMBERWEST FOREST LIMITED	D'ARCY POINT	31.2	0.2	0.0		2.6	7.7	7.7	7.7
1	11057	MINISTRY OF FORESTS	NEAR CROSSE POINT ON TZARTUS ISLAND	104.0	0.8	0.1		8.8	25.6	25.6	25.6
1	11058	MINISTRY OF FORESTS	AT SKULL LAKE, EFFINGHAM INLET	104.0	0.8	0.1		8.8	25.6	25.6	25.6
1	11164	LAFARGE CONCRETE A DIVISION OF LAFARGE CA	1458 INDUSTRIAL WAY, PARKSVILLE, BC						0.1	0.0	0.0
1	11165	LAFARGE CONCRETE A DIVISION OF LAFARGE CA	2491 KENWORTH ROAD, NANAIMO						0.1	0.0	0.0
1	11203	MACMILLAN BLOEDEL LIMITED	BEDINGFIELD BAY, VICINITY OF TOFINO	52.0	0.4	0.0		4.4	12.8	12.8	12.8
1	11205	INTERNATIONAL FOREST PRODUCTS LIMITED	STEWARDSON INLET	95.7	0.7	0.1		8.1	23.6	23.6	23.6
1	11395	INTERNATIONAL FOREST PRODUCTS LIMITED	CAVIAR COVE, DRURY INLET	156.0	1.2	0.1		13.2	38.4	38.4	38.4
1	11396	EDGE GRAIN FOREST PRODUCTS LTD.	NEAR WOSS CAMP	9.4	0.1	0.0		0.8	2.3	2.3	2.3
1	11493	INTERNATIONAL FOREST PRODUCTS LIMITED	BUTTERFLY BAY, WEST THURLOW ISLAND	52.0	0.4	0.0		4.4	12.8	12.8	12.8
1	11537	CAMPBELL RIVER FIBRE LTD	ADJACENT TO MENZIES BAY	20.8	0.2	0.0		1.8	5.1	5.1	5.1
1	11550	TIMBERWEST FOREST LIMITED	BEAVER COVE	273.0	2.1	0.2		23.1	67.2	67.2	67.2
1	11587	MAYO FOREST PRODUCTS LTD	CRACE STREET, NANAIMO						35.7	14.3	7.1
1	11614	INTERNATIONAL FOREST PRODUCTS LIMITED	WARNER BAY	26.0	0.2	0.0		2.2	6.4	6.4	6.4
1	11615	INTERNATIONAL FOREST PRODUCTS LIMITED	RANKIN COVE	41.6	0.3	0.0		3.5	10.2	10.2	10.2
1	11803	REMAC FOREST PRODUCTS LIMITED	SPENCER CREEK	52.0	0.4	0.0		4.4	12.8	12.8	12.8
1	11843	NORM'S BACKHOE & EXCAVATING LTD	GENERAL HILL PIT, CAMPBELL RIVER	124.8	1.0	0.1		10.6	30.7	30.7	30.7
1	11847	TIMBERWEST FOREST LIMITED	ARTLISH RIVER, TAHSISH INLET	26.0	0.2	0.0		2.2	6.4	6.4	6.4
1	12013	WESTERN FOREST PRODUCTS LIMITED	FRAZER BAY	124.9	1.0	0.1		10.6	30.8	30.8	30.8
1	12060	B. & D. SHINGLE LTD	TOQUART MINE SITE, PORT ALBERNI	93.6	0.7	0.1		7.9	10.1	5.5	4.0
1	12154	INTERNATIONAL FOREST PRODUCTS LIMITED	FREDERICK SOUND, SEYMOUR INLET	76.5	0.6	0.1		6.5	18.8	18.8	18.8
1	12283	HIGHLAND MILLS LTD	CROMAN RELOAD, 10 KM SOUTH OF WOSS	32.8	0.3	0.0		2.8	8.1	8.1	8.1
1	12287	SHUSHARTIE LOGS SALES LTD	WOODS LAGOON, SEYMOUR INLET	39.0	0.3	0.0		3.3	9.6	9.6	9.6
1	12301	WESTERN FOREST PRODUCTS LTD., GENERAL PA	NORTH OF PORT ELIZA	41.0	0.3	0.0		3.5	10.1	10.1	10.1

Point Source Emissions by Source (page 4 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
1	12394	HUB CITY PAVING LTD.	SINCLAIR GANDERTON GRAVEL PIT (MOUNTAIN D	10.8	48.0	6.8		3.6	39.2	8.3	3.3
1	12581	ROOFTECK SHAKE & SHINGLE LTD.	TOQUART BAY	136.0	1.0	0.1		11.5	14.7	8.1	5.9
1	12634	CUMBERLAND PRECAST LTD.	4616 CUMBERLAND ROAD, CUMBERLAND						2.2	1.1	0.3
1	12661	REBCO WOOD PRODUCTS LTD.	2511 SHERWOOD ROAD, PORT ALBERNI	2.1	10.5	0.1		1.4	19.1	8.3	4.1
1	12740	OCEAN CONSTRUCTION SUPPLIES LIMITED	NANAIMO						0.3	0.1	0.0
1	12741	LAFARGE CANADA INC.	COMOX ROAD, COMOX						0.7	0.6	0.3
1	12765	HYLAND PRECAST INC.	4552 CUMBERLAND ROAD, CUMBERLAND						0.1	0.0	0.0
1	12790	TOZAN CULTURAL SOCIETY	MALASPINA UNIVERSITY/COLLEGE, NANAIMO	9.3	0.1	0.0		2.7	0.4	0.2	0.1
1	12850	COURTENAY CONCRETE PRODUCTS LTD.	2750 CUMBERLAND ROAD, COURTENAY						0.0	0.0	0.0
1	12982	COMPTON, ELIZABETH KATHLEEN	CROFTON	78.0	0.6	0.1		6.6	19.2	19.2	19.2
1	12989	ARC ASPHALT RECYCLING CORP.	VARIOUS PLACES THROUGHOUT B.C.	11.4	10.8	17.4		8.4			
1	12997	FAMILY PET SERVICES LTD.	693 AQUARIUS ROAD, METCHOSIN		0.0				0.0	0.0	0.0
1	13036	ARROWSMITH CONCRETE LTD.	CHATSWORTH ROAD, QUALICUM BEACH						0.1	0.0	0.0
1	13257	DOMAN FOREST PRODUCTS LIMITED	CHEMAINUS	3.8	19.3	0.1		1.0	17.4	7.2	3.7
1	13312	DOLAN'S CONCRETE LTD.	ROGER STREET, PORT ALBERNI						0.0	0.0	0.0
1	13316	WEE TREE LUMBER CO. LTD.	SOUTH WATTS ROAD, SALTAIR						0.0	0.0	0.0
1	13353	PACIFIC FOREST PRODUCTS LIMITED	BLOWHOLE BAY, NOOTKA	130.0	1.0	0.1		11.0	32.0	32.0	32.0
1	13416	BEDROCK REDI-MIX LTD.	BRETON PAGE ROAD, CASSIDY						0.0	0.0	0.0
1	13601	WYLIE PAVING LTD.	OFF SPRUSTON RD., CASSIDY, PACIFIC FOREST P	16.9	63.9	9.8		6.9	9.9	4.9	3.9
1	13656	B. BAKKEN EXCAVATING LTD.	CAMPBELL RIVER	164.0	1.3	0.1		13.9	40.4	40.4	40.4
1	13668	WESTWOOD MOULDINGS LTD.	3110 HOPE PLACE, CHEMAINUS						18.3	7.3	3.7
1	13743	S.P.C.A. PARKSVILLE/QUALICUM BEACH BRANCH	WEST SIDE OF ERRINGTON PIT ON HWY. 4	0.0	0.0	0.0		0.0	0.0	0.0	0.0
1	13748	COWICHAN LAKE CONCRETE LTD.	LAKE COWICHAN						0.0	0.0	0.0
2	1647	WESTERN PULP INC.	WOODFIBRE	3274.4	278.0	76.9	13.6	145.2	581.0	526.6	419.9
2	1835	CONTINENTAL POLE LTD.	MOUNT CURRIE	103.5	0.8	0.1		8.8	11.1	6.1	4.5
2	2061	WELDWOOD OF CANADA LIMITED	SQUAMISH, GARIBALDI WAY-EMPIRE LUMBER						304.6	121.9	60.9
2	2328	JACK CEWE LIMITED	JERVIS INLET	3.7	17.1	1.1		1.2	1.2	1.2	1.1
2	3095	HOWE SOUND PULP AND PAPER LIMITED	PORT MELLON	8632.4	1379.7	405.6	9.1	409.9	313.5	282.1	232.4
2	3149	MACMILLAN BLOEDEL LIMITED	POWELL RIVER	24488.2	6881.0	2189.5	206.7	1500.4	2302.6	1924.2	1524.6
2	3260	SWANSON'S READY-MIX LTD.	SECHELT						0.0	0.0	0.0
2	3394	YOUNG LIFE OF CANADA	MALIBU, PRINCESS LOUISA INLET	0.6	0.2	0.1		0.2	0.4	0.3	0.2
2	3415	J.S. JONES HOLDINGS LTD.	BOSTON BAR	3357.2	83.4	2.9		309.8	469.9	257.8	165.2
2	3969	COAST PAVING LTD.	POWELL RIVER, 7475 COVEY STREET	5.3	8.3	7.0		3.6	15.0	2.4	0.4
2	4397	CAMP ARTABAN SOCIETY	GAMBIER ISLAND	0.0	0.1	0.0		0.0	0.8	0.3	0.2
2	4658	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	BOSTON BAR								
2	5030	ALPINE PAVING 1978 LTD.	MOBILE PLANT, SQUAMISH AREA	16.7	50.6	13.9		8.3	31.4	7.0	3.0
2	5077	CARDINAL CONCRETE LTD.	SQUAMISH						0.1	0.0	0.0
2	5163	CROWN ZELLERBACH CANADA LIMITED	GOLIATH BAY IN JERVIS INLET	0.0	0.0	0.0		0.0	0.0	0.0	0.0
2	5789	BOYS AND GIRLS CLUB OF GREATER VANCOUVE	HOWE SOUND-POTLATCH CREEK	0.1	0.0	0.0		0.1	0.1	0.0	0.0
2	6045	RIVTOW STRAITS LIMITED	PORT MELLON, S-C	16.8	0.1	0.0		1.4	4.1	4.1	4.1
2	6068	CRANBERRY CONSTRUCTION SERVICES LTD.	POWELL RIVER, S-C						0.0	0.0	0.0
2	6431	CARDINAL CONCRETE LTD.	WHISTLER						0.1	0.1	0.0
2	6563	COUNCIL OF FOREST INDUSTRIES OF B.C.	PORT MELLON, S-C								
2	6815	SLIM'S EXPLORATION AND MINING LTD.	SQUAMISH - ASHLU CREEK						0.1	0.1	0.1
2	6895	SWANSON'S READY-MIX LTD.	KLEINDALE, SUNSHINE COAST						0.0	0.0	0.0
2	6945	TRANS MOUNTAIN PIPELINE CO. LTD.	BURNABY								
2	7012	JACKSON BROTHERS LOGGING CO. LTD.	SECHELT, 11 KM NORTH								
2	7171	TRANS MOUNTAIN ENTERPRISES OF B.C. LIMITED	RICHMOND, 5951 FERGUSON ROAD								
2	7391	ACTION HOLDINGS LTD.	WHISTLER AREA	1.7	6.4	2.7		0.6	12.2	2.1	0.5
2	7400	INDIAN HARDWOODS 1981 LTD.	POPKUM, 54370 BRIDAL FALLS ROAD	15.6	0.1	0.0		1.3	2.9	1.1	0.7
2	7406	COUNCIL OF FOREST INDUSTRIES OF B.C.	HARRISON LAKE	2.0	0.0	0.0		0.2	0.5	0.5	0.5
2	7503	INTERNATIONAL FOREST PRODUCTS LIMITED	SMANIT CREEK	2.1	0.0	0.0		0.2	0.5	0.5	0.5

Point Source Emissions by Source (page 5 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
2	7558	MACMILLAN BLOEDEL LIMITED	POWELL RIVER			0.2					
2	7705	INTERNATIONAL FOREST PRODUCTS LIMITED	NARROWS INLET	166.4	1.3	0.1		14.1	41.0	41.0	41.0
2	7720	SUN COAST PAVING LTD.	CRESTON, MOBILE PLANT	29.6	121.0	39.8		11.1	23.4	10.1	7.6
2	7811	A.J. FOREST PRODUCTS LTD.	SQUAMISH	18.7	0.1	0.0		1.6	4.6	4.6	4.6
2	8166	DIACHEM INDUSTRIES LTD.	SQUAMISH	2.0	9.4	0.1		0.5	0.4	0.4	0.4
2	8261	CURTIS PAVING CO. LTD.	VARIOUS LOCATIONS	4.6	12.3	4.3		2.4	26.5	4.3	0.8
2	8422	INTERNATIONAL FOREST PRODUCTS LIMITED	PEMBERTON	97.5	0.8	0.1		8.3	24.0	24.0	24.0
2	8432	VICTORIA PETRO SERVICES LIMITED	PEMBERTON, HIGHWAY 99								
2	8606	BAYSIDE SAWMILLS LTD.	PORT MELLON, HILLSIDE INDUSTRIAL PARK						43.1	17.3	8.6
2	8618	SHELL CANADA PRODUCTS LIMITED	ABBOTSFORD, 900 BLOCK SUMAS WAY								
2	8766	B. A. BLACKTOP LTD.	PORPOISE BAY ROAD, NORTH OF SECHELT	1.5	1.4	2.3		1.1	0.0	0.0	0.0
2	8924	C.R.B. LOGGING CO. LTD.	PEMBERTON VALLEY	32.5	0.3	0.0		2.8	7.0	7.0	7.0
2	8972	CAMP FIRCOM SOCIETY OF THE UNITED CHURCH	GAMBIER ISLAND	0.2	0.2	1.1		0.1	0.2	0.1	0.0
2	8986	PACIFIC FOREST PRODUCTS LIMITED	TWIN CREEKS, HOWE SOUND								
2	10690	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	ALOUETTE DAM								
2	10860	INTERNATIONAL FOREST PRODUCTS LIMITED	NARROWS INLET, TZOONIE POINT	0.7	0.0	0.0		0.1	0.2	0.2	0.2
2	11034	TERMINAL FOREST PRODUCTS LTD.	LANGDALE, HOWE SOUND								
2	11039	RUSKIN CENTRE ENTERPRISES LTD.	RUSKIN, 287 STREET & LOUGHEED HIGHWAY								
2	11278	PRETTYS' TIMBER CO. LTD.	HARRISON LAKE, (EAST SIDE) BEAR CREEK CAMP	260.0	2.0	0.2		22.0	64.0	64.0	64.0
2	11286	INTERNATIONAL FOREST PRODUCTS LIMITED	HARRISON LAKE, SILVER RIVER DRY LAND SORT	31.2	0.2	0.0		2.6	7.7	7.7	7.7
2	11308	A. J. CARSTEN COMPANY LTD.	POWELL RIVER, 9845 MALASPINA ROAD					0.0	2.8	1.3	0.8
2	11832	SQUAMISH TIMBER CO. LTD.	SQUAMISH								
2	12608	CANADIAN FOREST PRODUCTS LTD.	HEAD OF HARRISON LAKE (NW CORNER)	7.7	0.1	0.0		0.6	1.9	1.9	1.9
2	12736	FIEDLER BROS. CONTRACTING LTD.	GIBSONS, GILMOUR ROAD	859.1	6.6	0.7		72.7	158.6	158.6	158.6
2	12764	NORTHERN UTILITIES INC.	SQUAMISH, 5 KM EAST OF	3.0	13.7	0.9		0.9	1.0	1.0	0.9
2	12779	INTERNATIONAL FOREST PRODUCTS LIMITED	PEMBERTON INDUSTRIAL PARK	15.6	0.1	0.0		1.3	2.9	1.1	0.7
2	12823	COASTAL MOUNTAIN EXCAVATIONS LTD.	WHISTLER, WEDGE GRAVEL PIT	162.4	1.2	0.1		13.7	40.0	40.0	40.0
2	12882	CEDAR GROVE TREE SERVICE LTD.	MOUNT CURRY, APPROX. 18 KM NORTH	48.0	0.4	0.0		4.1	11.8	11.8	11.8
2	12899	HALRAY LOGGING CO. LTD.	SOO RIVER, 13 KM MARK, FOREST SERVICE ROAD	8.3	0.1	0.0		0.7	2.0	2.0	2.0
2	12900	HALRAY LOGGING CO. LTD.	LILLOOET, 15 KM WEST (FOREST SERVICE ROAD)	8.3	0.1	0.0		0.7	2.0	2.0	2.0
2	12901	HALRAY LOGGING CO. LTD.	SOO RIVER, 6 KM MARK, FOREST SERVICE ROAD	8.3	0.1	0.0		0.7	2.0	2.0	2.0
2	13272	PRETTYS' TIMBER CO. LTD.	WESTWOOD BAY ON WEST SIDE OF HARRISON LA	78.0	0.6	0.1		6.6	19.2	19.2	19.2
2	13397	INTERNATIONAL FOREST PRODUCTS LIMITED	FREDERICK ARM	16.1	0.1	0.0		1.4	4.0	4.0	4.0
2	13418	TRANS MOUNTAIN PIPELINE CO. LTD.	SUMAS, SUMAS MOUNTAIN ROAD								
2	13501	INTERNATIONAL FOREST PRODUCTS LIMITED	SALMON INLET, (HEAD OF) CLOWHOM LOGGING C	312.0	2.4	0.2		26.4	76.8	76.8	76.8
3	1465	HIRAM WALKER AND SONS LIMITED	WINFIELD	3.6	48.4	0.1		0.2	0.6	0.2	0.1
3	1513	WEYERHAEUSER CANADA LTD.	VAVENBY	2669.5	23.9	3.0		235.2	541.6	306.2	213.7
3	1517	WEYERHAEUSER CANADA LTD.	KAMLOOPS PULP MILL	2404.9	433.3	281.6	26.3		2737.2	1766.6	1300.3
3	1541	SIMILCO MINES LTD	PRINCETON						154.4	53.1	16.2
3	1557	HIGHLAND VALLEY COPPER CORPORATION	HIGHLAND VALLEY-LORNEX	14.8	59.4	61.1	1.6	1.1	420.4	186.8	55.0
3	1585	BRITISH COLUMBIA BUILDINGS CORPORATION	SUMMERLAND								
3	1754	BRENDA MINES LIMITED	PEACHLAND								
3	1770	KOOTENAY BOUNDARY REGIONAL DISTRICT	GRAND FORKS	1.4	2.3	1.1		0.1	23.9	23.9	23.9
3	1775	CROWN PACKAGING LTD.	KELOWNA	10.0	40.0	0.2		1.6	1438.9	810.2	610.4
3	1797	B.C. GAS INCORPORATED	SAVONA	42.1	105.3	0.2		2.4	4.9	4.9	4.9
3	1798	INLAND NATURAL GAS CO. LTD.	KINGSVALE	42.1	105.3	0.2		2.4	4.9	4.9	4.9
3	1808	PACIFIC ABRASIVES AND SUPPLY INC.	GRAND FORKS						130.8		
3	1846	WEYERHAEUSER CANADA LTD.	PRINCETON	4407.2	70.2	3.6		389.4	783.6	423.4	291.6
3	1847	WEYERHAEUSER CANADA LTD.	OKANAGAN FALLS	2.0	9.8	0.1		0.5	68.7	27.5	13.7
3	1861	MOUNT ROYAL HOLDINGS LTD	WINFIELD						1.0	0.5	0.2
3	1894	LAFARGE CANADA INC.	KAMLOCPS		651.6	457.2			430.8	197.1	75.1
3	1907	BUCKERFIELD'S LIMITED	ARMSTRONG	0.1	0.3	0.0		0.0	26.0	10.4	5.2

Point Source Emissions by Source (page 6 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
3	1916	GREENWOOD FOREST PRODUCTS LTD.	PENTICTON	35.4	0.3	0.0		3.0	33.5	14.0	7.5
3	1937	FEDERATED CO-OPERATIVES LIMITED	CANOE	1636.5	22.7	1.3		144.6	472.8	231.9	147.2
3	1945	TOLKO INDUSTRIES LTD.	MERRITT	1496.2	16.8	1.2		135.1	334.1	183.3	133.0
3	1951	POPE AND TALBOT LTD.	GRAND FORKS	5477.5	129.6	4.7		477.9	734.2	398.6	276.9
3	1952	POPE AND TALBOT LTD.	MIDWAY	8453.8	83.8	6.6		738.4	1044.3	566.5	390.2
3	1973	AINSWORTH LUMBER CO.LTD	LILLOOET	4869.2	47.5	3.8		430.7	662.6	357.8	236.6
3	1996	EVANS PRODUCTS COMPANY LIMITED	MALAKWA	2.9	14.3	0.1		0.8	15.9	6.4	3.2
3	2001	TOLKO INDUSTRIES	LAVINGTON	2893.9	22.8	2.2		261.7	439.8	233.8	152.6
3	2002	GORMAN BROS. LUMBER LTD.	LUMBY	474.5	3.7	0.4		40.2	73.0	40.2	29.2
3	2009	BEAU J LUMBER LTD.	MALAKWA	296.4	2.3	0.2		25.1	45.6	25.1	18.2
3	2011	RIVERSIDE FOREST PRODUCTS LIMITED	LUMBY	2386.5	23.2	1.9		208.6	506.3	261.1	174.5
3	2019	WEYERHAEUSER CANADA LTD.	LUMBY	1.7	8.6	0.1		7.7	78.2	33.4	14.5
3	2026	SCHMIDT, R.V.	LUMBY	1.8	8.9	0.1		2.2	29.3	17.0	11.7
3	2042	B N BOLTON INC	LAVINGTON	0.1	0.4	0.0		0.0	0.1	0.0	0.0
3	2082	FLETCHER CHALLENGE CANADA LIMITED	KELOWNA	2322.7	65.9	14.6		181.7	866.6	577.0	366.9
3	2122	GORMAN BROS. LUMBER LTD.	WESTBANK	2981.3	26.3	3.2		255.1	367.6	206.1	142.3
3	2258	CANPAR INDUSTRIES	GRAND FORKS	18.4	11.8	1.4		0.7	640.3	285.0	173.0
3	2280	CONTINENTAL LIME LTD.	PAVILION LAKE IR #3	31.4	157.0	0.9		8.3	143.4	18.3	10.1
3	2340	WESTERN STAR TRUCK INC.	KELOWNA	33.8	155.5	10.3		10.6	11.1	11.1	10.4
3	2410	ASPEN PLANERS LTD.	MERRITT	1.5	7.5	0.0		4.5	16.3	8.8	3.1
3	2412	ARDEW WOOD PRODUCTS LTD.	MERRITT	62.4	0.5	0.0		5.3	9.6	5.3	3.8
3	2414	WEYERHAEUSER CANADA LTD.	MERRITT	2.5	12.3	0.1		0.7	94.6	38.7	19.6
3	2455	OK BUILDERS SUPPLIES LIMITED	WINFIELD						0.1	0.0	0.0
3	2524	TOLKO INDUSTRIES LTD.	HEFFLEY CREEK	8.0	40.1	0.2		1.3	396.5	208.8	76.6
3	2560	THE B.C. PEA GROWERS LTD.	ARMSTRONG						16.3	6.5	3.3
3	2573	FEDERATED CO-OPERATIVES LIMITED	CANOE	95.0	2.7	0.6		11.9	177.9	73.4	36.4
3	2717	FLETCHER CHALLENGE CANADA LIMITED	ARMSTRONG	1630.1	46.3	10.2		137.5	484.5	328.2	234.0
3	2719	B.A. BLACKTOP LIMITED	KAMLOOPS	1.6	6.3	0.0		0.1	28.3	4.0	0.2
3	2743	PRINCETON, TOWN OF	PRINCETON	4.6	0.0	0.0		0.4	1.1	1.1	1.1
3	2978	GILBERT SMITH FOREST PRODUCTS LIMITED	BARRIERE	280.0	2.2	0.2		23.7	78.0	37.7	24.2
3	3013	KELOWNA ELECTROPLATING LTD.	KELOWNA						25.9	10.4	5.2
3	3022	WEYERHAEUSER CANADA LTD.	KAMLOOPS	11.3	56.5	0.3		29.3	171.4	83.1	33.5
3	3024	ROGERS FOODS LTD.	ARMSTRONG						6.7	1.7	0.7
3	3066	MARDAN ENTERPRISES LTD	ENDERBY	73.5	0.6	0.1		6.2	16.9	8.5	5.6
3	3102	WESTLAKE PAVING AND AGGREGATES LTD.	WESTBANK	0.6	0.9	0.9		0.4	51.1	7.2	0.4
3	3106	SURE CROP FEEDS (1986) LTD	GRINDROD	0.3	1.5	0.0		0.1	120.1	3.7	0.3
3	3122	TOLKO INDUSTRIES LTD.	LOUIS CREEK	1831.0	16.9	1.4		169.4	375.7	200.8	131.7
3	3124	SLOCAN FOREST PRODUCTS LTD.	VAVENBY	3750.0	34.3	3.7		337.0	681.7	371.5	246.4
3	3186	CONSUMERS PACKAGING INC. / EMBALLAGES CO	LAVINGTON		372.6	298.6		45.9	71.5	67.9	65.1
3	3236	WESTCOAST ENERGY INC.	SAVONA	384.1	90.4			51.2	26.4	26.4	25.9
3	3240	WESTCOAST ENERGY INC.	KINGSVALE	118.1	31.9			1.9	28.3	28.3	28.3
3	3446	INTERNATIONAL FOREST PRODUCTS LIMITED	ADAMS LAKE	2068.6	15.9	1.6		175.0	222.8	122.5	89.1
3	3483	VERNON PAVING LTD.	ARMSTRONG	0.8	1.2	1.0		0.5	21.6	3.1	0.2
3	3610	SUN-RYPE PRODUCTS LIMITED	KELOWNA	1.7	7.1	0.0		0.3	0.3	0.3	0.3
3	3621	SHELL CANADA PRODUCTS LIMITED	VERNON								
3	3680	OK READY MIX LTD.	VERNON						0.1	0.0	0.0
3	3682	OK READY MIX LTD.	KELOWNA						0.1	0.1	0.0
3	3683	OK READY MIX LTD.	RUTLAND						0.1		
3	3708	OK READY MIX LTD.	PENTICTON	0.1	0.7	0.0		0.0	2.7	1.3	0.4
3	3740	DANKOE MINES LTD.	KEREMEOS						17.3		
3	3848	OKANAGAN AGGREGATES LTD.	ARMSTRONG	7.1	30.1	5.7		2.5	19.1	5.9	2.8
3	3888	PURITY FEED CO. LTD.	KAMLOOPS	0.0	0.1	0.0		0.0	3.0	0.9	0.1

Point Source Emissions by Source (page 7 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
3	3911	AINSWORTH LUMBER CO.LTD	SAVONA	759.8	12.2	0.6		68.0	161.3	83.1	50.2
3	4068	KELOWNA READY-MIX INC.	KELOWNA	0.0	0.2	0.0		0.0	0.1	0.1	0.0
3	4086	PETERS BROS. PAVING 1981 LTD.	PENTICTON	1.3	1.3	2.0		1.0	19.6	2.8	0.2
3	4215	AINSWORTH LUMBER CO.LTD	CLINTON	5865.8	49.6	5.7		505.2	686.7	360.9	252.2
3	4230	KEE-PEE LAMINATING LTD.	PENTICTON						11.1	4.4	2.2
3	4393	AFTON OPERATING CORPORATION	KAMLOOPS			8.8			108.9		
3	4400	LYTTON LUMBER LTD.	LYTTON	140.2	1.1	0.1		11.9	34.5	34.5	34.5
3	4517	OK BUILDERS SUPPLIES LIMITED	KAMLOOPS						0.1	0.1	0.0
3	4545	MIGHTY WHITE DOLOMITE LIMITED	ROCK CREEK						72.2	36.8	10.8
3	4549	AINSWORTH LUMBER CO.LTD	CLINTON	142.7	1.1	0.1		12.1	35.1	35.1	35.1
3	4574	C.P.I. CANYON POWER INCORPORATED	LYTTON (LYTTON LUMBER LTD.)	1942.8	15.7	1.5		168.5	311.2	171.6	121.9
3	4650	KELOWNA READY-MIX INC.	WESTBANK	0.1	0.3	0.0		0.0	0.1	0.1	0.0
3	4659	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	LYTTON	1.2	5.5	0.4		0.4	0.4	0.4	0.4
3	4670	IMPERIAL OIL LIMITED	ARMSTRONG								
3	4697	NORTH ENDERBY TIMBER LTD.	ENDERBY	642.2	4.9	0.5		54.3	88.7	45.9	31.6
3	4719	GWIL INDUSTRIES INC.	WINFIELD	1.7	10.5	3.6		0.8	0.5	0.4	0.3
3	4723	MIDVALLEY CONSTRUCTION LIMITED	WESTBANK	1.4	1.4	2.0		1.0	29.3	4.1	0.2
3	4787	CANTEX ENGINEERING AND CONSTRUCTION CO.	MOBILE ASPHALT PLANT	7.2	18.1	11.6		4.0	16.1	4.4	1.7
3	4900	B.J. CARNEY AND COMPANY, LIMITED	SICAMOUS	316.9	2.4	0.2		26.8	34.1	18.8	13.7
3	5093	INTERNATIONAL FOREST PRODUCTS LIMITED	ADAMS LAKE	214.0	1.6	0.2		18.1	52.7	52.7	52.7
3	5190	KAMLOOPS SCRAP IRON LTD.	BROCKLEHURST	0.1	0.7	0.0		0.0	1.3	1.3	1.3
3	5225	NESTE CANADA INC.	KAMLOOPS	0.8	1.0	0.0		0.1	0.0	0.0	0.0
3	5362	MALAKWA ENTERPRISES LTD.	MALAKWA	147.9	1.1	0.1		12.5	22.8	12.5	9.1
3	5499	DAWSON CONSTRUCTION LIMITED	KNUTSFORD	0.6	0.8	2.5		0.4	5.6	0.8	0.0
3	5569	SIMILCO MINES LTD	PRINCETON						61.7	27.8	8.1
3	5596	UNITED GRAIN GROWERS LTD.	ARMSTRONG	4.3	20.9	0.1		1.2	32.7	16.5	5.4
3	5612	KOHLER LTD	ARMSTRONG						183.5	94.3	66.8
3	5648	R.D.J. ENTERPRISES LTD.	KELOWNA	2.2	10.8	0.1		0.6	0.3		
3	5730	OLIVER READI-MIX LIMITED	OLIVER						0.0	0.0	0.0
3	5909	OSOYOOS READY MIX LIMITED	OSOYOOS						0.0		
3	5932	PETERS BROS. PAVING 1981 LTD.	MOBILE ASPHALT PLANT	21.2	87.0	40.0		7.8	50.1	15.9	7.9
3	6035	SUMMERLAND READI-MIX LTD.	SUMMERLAND						0.1	0.0	0.0
3	6048	NORTH OKANAGAN REGIONAL DISTRICT	ENDERBY	2.3	0.0	0.0		0.2	0.6	0.6	0.6
3	6089	EMIL ANDERSON CONSTRUCTION CO. LTD.	MOBILE	15.4	18.2	55.3		10.5	52.5	12.1	2.9
3	6129	SALMON ARM PAVING 1977 LTD.	MOBILE #311	10.5	41.8	5.3		4.0	60.1	10.8	3.0
3	6136	OK BUILDERS SUPPLIES LIMITED	VERNON	4.0	20.1	0.1		1.1	0.7	0.2	0.0
3	6137	OK BUILDERS SUPPLIES LIMITED	SUMMERLAND						0.1	0.0	0.0
3	6319	MITCHELL, MITCH	VERNON						0.1	0.1	0.0
3	6387	GRAND FORKS CONSTRUCTION SERVICES LTD.	GRAND FORKS						0.0	0.0	0.0
3	6484	CITC TIMBER CORP.	SICAMOUS EAST OF	72.6	0.6	0.1		6.1	7.8	4.3	3.1
3	6552	TILBURY CEMENT LIMITED	KAMLOOPS						3.0	1.5	0.4
3	6578	VALLEY FIBREBATH LTD.	ARMSTRONG						47.9	16.1	10.4
3	6581	MCLEOD'S BY-PRODUCTS 1978 LTD.	ARMSTRONG	1.2	4.7	0.0		0.2	0.2	0.2	0.2
3	6685	ZELENY ASPHALTING INC.	MOBILE:BG-840 #1654	2.1	2.0	3.2		1.5	7.2	1.6	0.4
3	6785	CENTRAL ELECTRIC MOTOR REWIND	KELOWNA		0.2	0.1		0.0	0.0	0.0	0.0
3	7041	PENTICTON FOUNDRY LIMITED	PENTICTON	31.7					124.9	0.2	27.7
3	7193	SUMMERLAND FOREST PRODUCTS LTD.	SUMMERLAND						42.1	16.8	8.4
3	7198	F.T. FIBERTECH LIMITED	SPALLUMCHEEN						40.3	2.9	1.4
3	7248	TIMBERWEST FOREST LIMITED	ASHCROFT (6.5KM UPSTREAM)	2.9	14.1	0.1		0.8	3.4	1.8	1.2
3	7249	NMV LUMBER LTD.	MERRITT	195.3	1.5	0.2		16.5	21.0	11.6	8.4
3	7424	MOLY-COP CANADA	KAMLOOPS								
3	7425	HOLLCAN MILLWORKS LTD.	MALAKWA	127.2	1.0	0.1		10.8	31.6	15.6	10.2

Point Source Emissions by Source (page 8 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
3	7428	MOLY-COP CANADA LTD	KAMLOOPS	6.0	23.9	0.1		0.5	0.5	0.5	0.5
3	7472	SOUTH OKANAGAN CONCRETE PRODUCTS LTD.	OSOYOOS						0.0	0.0	0.0
3	7474	CANWOOD FURNITURE FACTORY INC.	PENTICTON	95.3	2.7	0.6		77.9	18.9	7.0	4.7
3	7610	CAMPION MARINE INC.	KELOWNA						90.2	42.4	26.1
3	7612	HOMESTAKE CANADA INC.	HEDLEY	1.7	7.9	33.4		0.5	75.0	43.2	30.8
3	7616	RIVERSIDE FOREST PRODUCTS, KELOWNA DIVIS	KELOWNA								
3	7654	GEORGIA PACIFIC BLDG. MATERIAL SALES LTD.	CACHE CREEK	3244.8	25.0	2.5		274.6	349.4	192.2	139.8
3	7791	K & G POOL PRODUCTS LTD.	PENTICTON					0.1	5.1	2.7	1.8
3	7798	KON KAST PRODUCTS LTD.	KELOWNA	0.3	1.4	0.0		0.1	0.2	0.1	0.1
3	7833	INLAND COASTAL CEDAR PRODUCTS (1991) LTD.	SALMON ARM						10.9	4.4	2.2
3	7839	SICAMOUS SAND AND GRAVEL	SICAMOUS						7.5	3.8	1.1
3	7893	CANDORADO MINES LTD.	HEDLEY								
3	7899	348975 B.C. LTD.	ARMSTRONG						9.0	4.4	2.8
3	7908	SEAWARD MECHANICAL	APPROX. 10KM NORTH OF ALBAS	140.4	1.1	0.1		11.9	34.6	34.6	34.6
3	8141	LAKESIDE TIMBER LTD.	TAPPEN	1284.4	9.9	1.0		108.7	202.7	110.7	80.1
3	8142	SALMON ARM READY MIX LTD.	SALMON ARM						0.1	0.0	0.0
3	8233	OKANAGAN AGGREGATES LTD.	MOBILE ASPHALT PLANT	9.4	17.1	18.4		5.9	27.7	4.5	0.8
3	8529	NORGAARD READY-MIX LTD.	KAMLOOPS						0.1	0.0	0.0
3	8630	NORGAARD READY-MIX LTD.	ASHCROFT						0.1	0.0	0.0
3	8631	WESTERN INDUSTRIAL CLAY PRODUCTS LTD.	KAMLOOPS	11.1	55.8	0.3		2.9	147.5	124.4	113.5
3	8684	GABLE CONSTRUCTION LTD.	BC-VARIOUS LOCATIONS	11.3	27.7	11.7		6.4	11.0	2.8	1.5
3	8689	SICAMOUS CUSTOM SAWING	SICAMOUS	70.2	0.5	0.1		5.9	17.3	17.3	17.3
3	8890	DAVIS LAKE CEDAR LTD.	CHASE	95.1	0.7	0.1		8.0	10.2	5.6	4.1
3	8892		TAPPEN	3.5	3.3	5.3		2.6	31.4	4.4	0.3
3	9094	MILESTONE WOOD PRODUCTS INC.	SPALLUMCHEEN	37.4	1.1	0.2		3.9	28.6	12.5	6.2
3	10575	SICAMOUS SHAKE	MALAKWA	8.0	0.1	0.0		0.7	0.9	0.5	0.3
3	10714	PETRO-CANADA	KAMLOOPS								
3	10727	CAMBIE CEDAR PRODUCTS LTD.	CAMBIE	84.5	0.7	0.1		7.2	9.1	5.0	3.6
3	10812	MARVEL PRODUCTS LTD.	VERNON						3.6	2.1	1.5
3	10887	CANADIAN OIL FILTER RECOVERY CORPORATION	KELOWNA	1.4	10.0	4.7		0.8	0.5		
3	10904	LEISURE COACHWORKS LTD.	VERNON								
3	10960	MAX VEOTS COFFEE ROASTING LTD	VERNON						0.1	0.0	0.0
3	10965	OKANAGAN AGGREGATES LTD.	VARIOUS	41.0	156.9	27.1		16.5	56.6	20.6	12.0
3	10977	THOMPSON RIVER HARDWOODS LTD.	CAMPBELL CREEK	0.5	2.6	0.0		0.1	2.7	1.2	0.6
3	11095	MOUNTAIN VIEW PET CREMATORIUM	PENTICTON	0.1	0.0	0.0			0.4	0.3	0.3
3	11149	GOODE INDUSTRIES INC.	MONTE LAKE BC						0.1	0.0	0.0
3	11162	TAYLOR PAVING	SUMMERLAND	3.7	11.7	3.0		1.8	11.8	3.2	1.2
3	11295	GAMBRINUS MALTING CORPORATION	SPALLUMCHEEN						3.2	0.5	0.0
3	11314	AC-TEC PAVING LTD.	KAMLOOPS	11.5	11.1	17.4		8.4	108.0	15.2	0.9
3	11346	PAUL CREEK SLICING LTD.	KAMLOOPS	0.1	0.3	0.0		0.0	0.0	0.0	0.0
3	12008	CANTEX ENGINEERING AND CONSTRUCTION CO.	MOBILE ASPHALT PLANT	4.7	4.9	39.4		3.4	104.4	14.7	0.8
3	12016	MKM MANUFACTURING LTD.	SALMON ARM						11.3	4.5	2.3
3	12029	CHEVRON CANADA LIMITED	KAMLOOPS								
3	12201	PLEASANT VALLEY ASPHALT	ARMSTRONG	0.4	0.4	0.6		0.3	1.4	0.2	0.0
3	12674	CON-ROCK REDI-MIX LTD.	PENTICTON						0.0	0.0	0.0
3	12769	PARAGON VENTURES LTD.	GRINDROD	386.8	6.1	0.3		34.6	54.9	29.2	19.2
3	12775	NORTHERN LITE MFG LTD.	KELOWNA						12.0		
3	12795	ABEDA WOOD PRODUCTS	WINFIELD	0.1	0.4	0.0		0.6	9.1	4.0	1.8
3	13247	ARMSTRONG READY MIX 1995 LIMITED	ARMSTRONG						0.0	0.0	0.0
3	13265	MONASHEE CONCRETE LTD.	LUMBY						0.1	0.0	0.0
3	13286	PRINCETON REDI-MIX (1993) LTD.	PRINCETON						0.0	0.0	0.0
3	13291	GIBBS HOLDINGS LTD	KEREMEOS						0.0	0.0	0.0

Point Source Emissions by Source (page 9 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
3	13398	MOHAWK OIL CO. LTD.	KAMLOOPS BC	17.8	63.2	4.8		2.0	10.0	5.6	4.3
3	13596	PETER'S BROS CONSTRUCTION LTD.	MOBILE					22.8	24.5	14.0	10.0
3	13693	BIGFOOT INDUSTRIES INC	VERNON		0.7	0.5		0.1	0.1	0.1	0.1
3	13706	UAP/NAPA AUTOMARINE	KELOWNA		504.8	937.5		360.6	529.8	453.0	189.1
4	1501	FORDING COAL LIMITED	ELKFORD	326.6	7.9	1.7		34.1	170.8	57.0	26.8
4	1596	CRESTBROOK FOREST INDUSTRIES LTD.	CRANBROOK	98.7	3.7	0.1		12.1	29.8	16.1	8.9
4	1750	J.H. HUSCROFT LIMITED	ERICKSON	19.0	0.1	0.0		1.6	4.7	4.7	4.7
4	1756	CRESTBROOK FOREST INDUSTRIES LTD.	SKOOKUMCHUCK	113.4	0.9	0.1		9.6	27.9	27.9	27.9
4	1768	CITIC B.C. INC.	CASTLEGAR						7.7	3.1	1.5
4	1793	KALESNIKOFF LUMBER CO. LTD.	THRUMS	3.6	405.3	719.3		277.6	462.1	346.9	140.4
4	1807	ELKVIEW COAL CORPORATION	SPARWOOD	5951.7	53.9	6.7		498.1	761.5	391.4	272.6
4	1842	SLOCAN FOREST PRODUCTS LTD.	SLOCAN						10.8	4.3	1.3
4	1854	NU-DAWN RESOURCES INC.	SALMO	0.4	0.4	0.7		0.3	5.8	1.3	0.3
4	1873	B.A. BLACKTOP LIMITED	CRANBROOK	975.0	7.5	0.8		82.5	105.0	57.8	42.0
4	1899	ATCO LUMBER LTD	FRUITVALE	390.4	4.8	0.3		45.7	111.0	76.1	64.5
4	1935	GALLOWAY LUMBER COMPANY LIMITED	GALLOWAY	4441.6	35.3	3.4		395.8	752.2	414.2	286.5
4	1954	RADIUM FOREST PRODUCTS LTD.	RADIUM HOT SPRINGS					5.8	49.6	23.0	9.8
4	1987	ATCO LUMBER LTD	PARK SIDING	2751.2	22.2	2.1		242.3	433.5	116.3	65.7
4	1997	DOWNIE STREET SAWMILLS LTD.	REVELSTOKE	4814.7	852.5	122.2	49.7	313.5	601.6	336.7	237.5
4	2149	CRESTBROOK FOREST INDUSTRIES LTD.	SKOOKUMCHUCK	409.5	3.2	0.3		34.7	63.0	34.7	25.2
4	2240	JOE KOZEK SAWMILLS LTD.	REVELSTOKE						65.8	26.0	7.1
4	2267	IMASCO MINERALS INC.	SIRDAR	5.9	29.4	8.5		1.6	6.4	3.9	1.2
4	2443	COMINCO LIMITED	KIMBERLEY	5398.2	46.8	4.2		490.0	1019.7	550.3	369.0
4	2574	CRESTBROOK FOREST INDUSTRIES LTD.	ELKO	201.1	1.5	0.2		17.0	30.9	17.0	12.4
4	2602	COLUMBIA RIVER SHAKE AND SHINGLE LTD.	NAKUSP						212.3	84.9	42.5
4	2661	EVANS FOREST PRODUCTS LIMITED	DONALD	608.9	17.3	3.8		50.9	305.7	195.5	138.6
4	2662	EVANS FOREST PRODUCTS LIMITED	GOLDEN						0.0	0.0	0.0
4	2667	KORPACK CEMENT PRODUCTS LIMITED	TRAIL	19.7	98.3	0.6		5.2	392.7	213.1	106.8
4	2690	COMINCO LIMITED	TRAIL			13361.7			1740.1	1390.4	1176.1
4	2691	COMINCO LIMITED	TRAIL			1752.0			169.4	134.5	114.6
4	2692	COMINCO LIMITED	TRAIL						3.8	1.5	0.8
4	2721	SUNSET SEED COMPANY LIMITED	CRESTON	1.7	8.5	0.1		1.2	2.6	1.5	0.5
4	2760	KOOTENAY WOOD PRESERVERS LTD	BRISCO	138.3	1.3	0.1		11.7	14.9	8.2	6.0
4	2818	CANADA CEDAR POLE PRESERVERS LIMITED	GALLOWAY	29.6	147.9	0.9		7.8	4.5	4.5	4.5
4	2825	COLUMBIA BREWING COMPANY	CRESTON	4866.1	42.3	5.0		423.0	883.9	453.9	311.6
4	3028	CRESTBROOK FOREST INDUSTRIES LTD.	CANAL FLATS	1057.3	8.1	0.8		89.5	162.7	89.5	65.1
4	3038	NORTH STAR PLANING CO. INC.	ATHALMER	127.4	3.6	0.8		13.7	56.2	30.3	10.8
4	3039	WYNNDEL BOX & LUMBER COMPANY LIMITED	WYNNDEL	1846.5	510.6	752.2	20.2	89.8	253.5	201.0	161.4
4	3080	CITIC B.C. INC.	CASTLEGAR						5.6	4.2	1.6
4	3112	WESTROC INDUSTRIES LIMITED	INVERMERE	36.1	145.9	141.8		12.1	40.4	13.8	8.6
4	3281	SELKIRK PAVING LTD.	TRAIL						0.0	0.0	0.0
4	3485	LOUIS SALVADOR AND SON LTD	CRANBROOK	56.2	0.4	0.0		4.8	13.8	13.8	13.8
4	3724	EVANS FOREST PRODUCTS LIMITED	DONALD						0.1	0.0	0.0
4	3963	KORPACK CEMENT PRODUCTS LIMITED	TRAIL						0.1	0.0	0.0
4	3982	GARRETT READY MIX LIMITED	SPARWOOD	140.4	1.1	0.1		11.9	34.6	34.6	34.6
4	4138	WYNNDEL BOX & LUMBER COMPANY LIMITED	WYNNDEL	12.0	60.0	0.4		3.2	242.2	157.8	129.7
4	4147	ELDERS GRAIN COMPANY LTD.	CRESTON	81.2	203.5	0.4		4.8	9.5	9.5	9.5
4	4272	INLAND NATURAL GAS CO. LTD.	WARFIELD	176.4	415.1	2.1		371.8	48.2	48.2	48.2
4	4328	ALBERTA NATURAL GAS CO. LTD.	CROWS NEST	64.9	249.3	0.9		128.3	20.0	20.0	20.0
4	4330	ALBERTA NATURAL GAS CO. LTD.	ELKO	89.4	107.3	1.1		290.7	24.9	24.9	24.9
4	4331	ALBERTA NATURAL GAS CO. LTD.	MOYIE	14.0	0.1	0.0		1.2	3.5	3.5	3.5
4	4423	DOWNIE STREET SAWMILLS LTD.	REVELSTOKE								

Point Source Emissions by Source (page 10 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
4	4443	MCDONALD RANCH AND LUMBER LTD.	GRASMERE	514.8	4.0	0.4		43.6	79.2	43.6	31.7
4	4554	NELSON READY MIX CONCRETE LTD.	NELSON						0.0	0.0	0.0
4	4742	VALLEY BLACKTOP LTD.	REVELSTOKE	10.7	46.1	4.1		3.7	75.5	13.1	3.3
4	4751	CORBIN CREEK RESOURCES LTD.	CORBIN	35.4	177.2	1.1		9.4	215.0	152.0	65.9
4	5061	BXL BULK EXPLOSIVES LTD.	ELKFORD	0.3	1.1	7.9		0.0	0.1	0.1	0.0
4	5175	COMINCO LIMITED	TRAIL	272.3	2.1	0.2		23.0	67.0	67.0	67.0
4	5327	KOOTENAY RIVER CONCRETE INC.	CRESTON						0.1	0.1	0.0
4	5352	LINE CREEK RESOURCES LTD.	SPARWOOD	0.1	0.4	0.0		0.0	325.6	232.1	97.3
4	5490	POPE & TALBOT LTD.	CASTLEGAR					34.7	305.6	141.0	60.1
4	5771	COMINCO LIMITED	KIMBERLEY								
4	5907	MOUNTAIN MINERALS CO. LTD.	MOBERLY	0.7	3.3	0.0		0.2	28.8		
4	6014	MAX HELMER CONSTRUCTION	ATHALMER						0.0	0.0	0.0
4	6139	BEAR LUMBER LTD.	LUMBERTON	196.6	1.5	0.2		16.6	48.4	48.4	48.4
4	6140	BELL POLE CO. LTD.	REVELSTOKE	63.4	0.5	0.0		5.4	15.6	15.6	15.6
4	6167	BETHLEHEM RESOURCES CORPORATION	GOLDSTREAM								
4	6249	FORDING COAL LIMITED - LES CHARBONS FORDI	ELKFORD		242.1	449.6		172.9	313.2	232.8	91.7
4	6529	EVANS PRODUCTS COMPANY LIMITED	BUSH RIVER	0.5	0.0	0.1		0.3	0.3	0.1	0.0
4	6660	WEST ARM CONCRETE LTD.	NELSON						0.0	0.0	0.0
4	6722	BETHLEHEM RESOURCES CORPORATION	GOLDSTREAM	0.1	0.1	0.1		0.0	1.4	0.5	0.4
4	6760	E.P. NELSON SAWMILLS LIMITED	SPILLIMACHEEN	93.6	0.7	0.1		7.9	23.0	23.0	23.0
4	6765	EVANS PRODUCTS COMPANY LIMITED	GOLD RIVER	0.2	0.0	0.0		0.2	0.2	0.0	0.0
4	6906	GOLDEN CONCRETE LTD.	GOLDEN						0.0	0.0	0.0
4	7135	CORBIN CREEK RESOURCES LTD.	CORBIN						0.3	0.1	0.1
4	7139	SEEL FOREST PRODUCTS LTD.	EDGEWATER	304.3	2.4	0.2		26.1	33.7	18.5	13.3
4	7186	E.K. ECONOMY PAVING 1981 LTD.	CRANBROOK	5.6	20.4	3.5		2.4	34.9	8.9	3.0
4	7224	GALLOWAY LUMBER COMPANY LIMITED	GALLOWAY	23.4	0.2	0.0		2.0	5.8	5.8	5.8
4	7227	MEADOW CREEK CEDAR LTD.	MEADOW CREEK	140.4	1.1	0.1		11.9	34.6	34.6	34.6
4	7340	WEST K CONCRETE LTD	CHINA CREEK						0.0	0.0	0.0
4	7438	CASCADE CEDAR LTD.	REVELSTOKE	418.3	3.2	0.3		35.4	64.4	35.4	25.7
4	7545	PINERIDGE PAVING LIMITED	CHINA CREEK	2.3	2.2	17.8		1.7	12.9	2.9	0.7
4	7547	JONES TIES AND POLES 1973 LTD.	PATERSON	9.4	0.1	0.0		0.8	2.3	2.3	2.3
4	7621	KORPACK CEMENT PRODUCTS LIMITED	CASTLEGAR						0.1	0.0	0.0
4	7626	SELKIRK CEDAR AND LUMBER	CASTLEGAR						2.6	1.0	0.5
4	7628	SOUTH EAST PAVING	MOBILE	5.6	25.9	1.7		1.8	4.8	2.2	1.7
4	7729	SADDLE MOUNTAIN CEDAR PRODUCTS LTD.	NAKUSP	76.1	0.6	0.1		6.4	18.7	18.7	18.7
4	7823	MEADOW CREEK CEDAR LTD.	COOPER CREEK	2037.8	15.7	1.6		172.4	403.1	208.3	143.3
4	7824	KOOTENAY PACIFIC INDUSTRIAL INC.	CRANBROOK		0.0	0.0		0.0	0.1		
4	8059	CANADIAN PACIFIC LIMITED	GOLDEN					0.6			
4	8449	EVANS FOREST PRODUCTS LTD.	GOLDEN	0.9	0.1	0.1		0.7	0.7	0.2	0.2
4	8480	JOHNSON MATTHEY ELECTRONICS LIMITED	WARFIELD								
4	8743	VISHLOFF, NICK D.B.A. ERIE LAKE CEDAR	SALMO	19.0	0.1	0.0		1.6	4.7	4.7	4.7
4	8744	LABYRINTH SPECIALTY WOOD PRODUCTS LTD.	BRILLIANT	46.8	0.4	0.0		4.0	11.5	11.5	11.5
4	8745	LABYRINTH SPECIALTY WOOD PRODUCTS LTD.	BRILLIANT						0.2	0.1	0.0
4	8950	COOPER CREEK CEDAR LTD.	MEADOW CREEK	31.4	0.2	0.0		2.7	4.8	2.7	1.9
4	8954	A.M. CEDAR LTD.	NELSON	38.0	0.3	0.0		3.2	9.4	9.4	9.4
4	9019	K-C RECYCLING LTD.	TRAIL			3.3			0.7	0.6	0.4
4	10507	KARL BEATTIE CONTRACTING LTD.	REVELSTOKE	46.8	0.4	0.0		4.0	11.5	11.5	11.5
4	10513	GLACIER VALUE ADDED WOOD PRODUCTS	REVELSTOKE	23.4	0.2	0.0		2.0	5.8	5.8	5.8
4	10709	GOULD, LARRY - VALLEY RETAIL LUMBER SALES	SKOOKUMCHUCK	46.8	0.4	0.0		4.0	11.5	11.5	11.5
4	10724	HERRIDGE TRUCKING & SAWMILLING LTD.	NAKUSP	23.4	0.2	0.0		2.0	5.8	5.8	5.8
4	10836	ATCO LUMBER LTD	PARK SIDING	46.8	0.4	0.0		4.0	11.5	11.5	11.5
4	10981	WAPPLE, KENNETH ROBERT	COOPER CREEK	163.5	1.3	0.1		13.8	40.2	40.2	40.2

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
4	11049	POPLAR CREEK SAWMILLS LTD.	ARROW PARK	23.4	0.2	0.0		2.0	5.8	5.8	5.8
4	11184	MARDIS LOGGING CO. LTD.	SKOOKUMCHUCK	74.9	0.6	0.1		6.3	18.4	18.4	18.4
4	11383	UKASS LOGGING LTD.	WILMER CREEK	22.5	0.2	0.0		1.9	5.5	5.5	5.5
4	11385	BLAEBERRY TIMBER LTD.	MOBERLY	74.9	0.6	0.1		6.3	18.4	18.4	18.4
4	11672	GEORGE BRINKMAN DOING BUSINESS AS BOARD	MEADOW CREEK	16.4	0.1	0.0		1.4	4.0	4.0	4.0
4	11685	TOM BUZZELL DOING BUSINESS AS TOM BUZZELL	CRANBROOK	11.7	0.1	0.0		1.0	2.9	2.9	2.9
4	11688	REMPLE, HARVEY	MEADOW CREEK	29.0	0.2	0.0		2.5	7.1	7.1	7.1
4	11784	KOOTENAY PAVING LTD.	INVERMERE	1.4	1.4	2.2		1.1	7.3	1.0	0.1
4	11817	427123 B.C. LTD.	YMIR	46.8	0.4	0.0		4.0	11.5	11.5	11.5
4	11826	DOUG SMITH D.B.A. MEADOW CREEK CEDAR PRO	CRESTON	38.0	0.3	0.0		3.2	9.4	9.4	9.4
4	11978	NELSON DISTRICT COMMUNITY RESOURCES SOC	NELSON	7.0	0.1	0.0		0.6	1.7	1.7	1.7
4	12017	KOLMAN, HANS	ROBSON								
4	12086	SAVARIE WOOD LTD.	CRANBROOK	64.4	0.5	0.0		5.4	15.8	15.8	15.8
4	12237	FAWCETT, STEPHEN PHILIP	KASLO								
4	12282	GOOSE CREEK LUMBER LTD.	CRESCENT VALLEY	9.4	0.1	0.0		0.8	17.9	8.5	5.4
4	12498	FINDELL, WALTER D.B.A. FIMAC CEDAR SALES	SALMO	7.6	0.1	0.9		0.6	1.9	1.9	1.9
4	12536	FOREST FIBRE INCORPORATED	SALMO	22.7	0.2	0.0		1.9	5.6	5.6	5.6
4	12914	METRO ENGINEERING AND CONTRACTING LTD.	MOBILE	1.1	1.1	1.7		0.8	3.3	0.5	0.0
4	12948	SELKIRK REMANUFACTURING LTD.	BRILLIANT	1.4	0.0	0.0		0.1	0.3	0.3	0.3
4	12975	TOXCO WASTE MANAGEMENT LTD.	TRAIL			3.6	0.0		3.6		
4	13070	BC GAS UTILITY LTD.	KITCHNER	47.6	27.5	0.1		19.8	3.5	3.5	3.5
5	1548	WEST FRASER MILLS LTD.	WILLIAMS LAKE	6530.7	60.9	5.1		578.7	1116.1	643.6	486.2
5	1578	CARIBOO PULP AND PAPER COMPANY LIMITED	QUESNEL, NORTHSTAR ROAD	5535.3	510.1	1128.2	36.5	270.7	499.6	454.4	357.4
5	1595	GIBRALTAR MINES LTD.	MCLEESE LAKE						491.8	209.6	61.7
5	1614	WELDWOOD OF CANADA LIMITED	QUESNEL, TWO-MILE FLAT	68.6	343.2	2.1		39.7	117.2	60.9	23.4
5	1615	WELDWOOD OF CANADA LIMITED	100 MILE HOUSE	8637.5	80.9	10.5		757.9	1563.6	836.5	555.3
5	1764	WELDWOOD OF CANADA LIMITED	WILLIAMS LAKE	912.9	38.6	5.8		117.3	479.6	285.3	171.4
5	2484	TIMBERWEST FOREST LIMITED	WILLIAMS LAKE	5250.2	120.9	4.5		481.3	791.0	421.5	272.1
5	2576	QUESNEL WASTE DISPOSAL LTD.	QUESNEL-2 MILE FLAT	12350.0	95.0	9.5		1045.0	1900.0	1045.0	760.0
5	2718	FEDERATED PIPELINES (WESTERN)LTD.	AUSTRALIAN	11.2	88.2	0.0		2.2	0.3	0.2	0.2
5	3212	WESTCOAST ENERGY INC.	AUSTRALIAN	351.4	52.0			45.9	25.5	25.5	25.2
5	3235	WESTCOAST ENERGY INC.	93 MILE HOUSE	120.0	37.9			2.1	28.5	28.5	28.5
5	3244	WESTCOAST ENERGY INC.	150 MILE HOUSE	122.0	33.1			1.9	29.3	29.3	29.2
5	3247	IMPERIAL OIL, A PARTNERSHIP OF IMPERIAL LIMIT	WILLIAMS LAKE								
5	3250	IMPERIAL OIL, A PARTNERSHIP OF IMPERIAL LIMIT	100 MILE HOUSE					5.0			
5	3251	IMPERIAL OIL, A PARTNERSHIP OF IMPERIAL LIMIT	ALEXIS CREEK								
5	3283	LIGNUM LIMITED	WILLIAMS LAKE	517.9	24.4	3.3		74.5	247.1	158.4	92.2
5	3339	LITTLE VALLEY FOREST PRODUCTS LTD.	HAGENSBORG	243.4	1.9	0.2		20.6	61.8	34.0	24.7
5	3679	RIVERSIDE FOREST PRODUCTS (WILLIAMS LAKE)	WILLIAMS LAKE	31.6	157.9	1.0		34.0	185.4	88.9	36.3
5	3725	WELDWOOD OF CANADA LIMITED	QUESNEL-PLYWOOD ROAD	5442.1	255.2	11.4		452.3	1232.6	769.4	570.8
5	3803	LINDE BROS. LUMBER LTD.	SPRINGHOUSE	91.9	0.7	0.1		7.8	14.1	7.8	5.7
5	3849	GENE'S PAVING W.E. BALL	WILLIAMS LAKE	1.8	1.7	13.7		1.3	0.2	0.0	0.0
5	4263	AINSWORTH LUMBER CO LTD	EXETER ROAD	12541.4	101.8	11.1		1082.8	2035.3	1098.1	778.5
5	4631	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	DENNY IS - SHEARWATER								
5	4710	BRITISH COLUMBIA & POWER AUTHORITY	ANAHIM LAKE	29.9	137.4	9.1		9.0	9.8	9.8	9.2
5	5350	C AND C WOOD PRODUCTS LIMITED	QUESNEL	10.4	51.8	0.3		5.7	21.0	10.3	4.1
5	5737	CARIBOO CONSULTANTS LTD.	QUESNEL	749.0	5.8	0.6		63.4	115.2	63.4	46.1
5	5804	QUESNEL RIVER PULP COMPANY	QUESNEL	21.4	294.5	16.9	0.2	0.9	438.2	175.6	88.1
5	5890	BRITISH COLUMBIA & POWER AUTHORITY	BELLA COOLA	44.4	182.1	38.3		7.7	16.2	14.2	12.5
5	6920	H. WILLIAMSON BLACKTOP AND LANDSCAPING LT	MOBILE:BCE-300 #584	44.3	110.0	322.8		23.3	79.2	22.2	8.7
5	6921	H. WILLIAMSON BLACKTOP AND LANDSCAPING LT	MOBILE:BCE-400 #	48.4	118.6	339.1		25.8	79.4	22.8	9.3
5	7081	EVER-REDI CONCRETE PRODUCTS LTD.	QUESNEL						0.0	0.0	0.0

Point Source Emissions by Source (page 12 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
5	7206	LIGNUM LTD. AND RIVERSIDE FOREST PRODUCTS	WILLIAMS LAKE	5.6	0.0	0.0		0.5	1.4	1.4	1.4
5	7512	WEST FRASER MILLS LTD.	QUESNEL (TWO MILE FLAT)	1648.3	46.8	10.3		116.4	391.7	281.8	218.5
5	7841	QUEST WOOD PRODUCTS	QUESNEL	126.4	632.3	3.8		59.7	256.7	120.3	50.4
5	7842	EVER-REDI CONCRETE PRODUCTS LTD.	WILLIAMS LAKE						0.0	0.0	0.0
5	7844	SLOCAN FOREST PRODUCTS LTD.	QUESNEL	2.9	14.6	0.1		39.9	287.3	136.1	56.3
5	8029	CARRIER LUMBER LTD.	ANAHIM LAKE	3538.9	27.2	2.7		299.4	544.4	299.4	217.8
5	8347	WEST FRASER MILLS LTD.	QUESNEL-2 MILE FLAT						54.6	21.8	10.9
5	8562	NORTHERN CARIBOO HOLDINGS & MANAGEMENT	100 MILE HOUSE								
5	8792	CAMEL LAKE FORESTS PRODUCTS LTD.	100 MILE HOUSE	14.6	0.1	0.0		1.2	2.7	1.0	0.6
5	8796	WESTECH WOOD PRODUCTS LTD.	WILLIAMS LAKE						10.5	4.2	2.1
5	8808	NW ENERGY (WILLIAMS LAKE) LIMITED PARTNERS	WILLIAMS LAKE	4778.2	1012.3	29.9		338.4	160.8	99.6	84.1
5	9026	TERRACE PAVING(385191 B.C. LTD.)	QUESNEL-MADSEN 4000 #256	3.5	3.3	5.3		2.5	72.3	10.2	0.6
5	10669	WESTERN FOREST PRODUCTS LTD.	HARDY INLET - MACNAIR CR								
5	10984	JACKPINE FOREST PRODUCTS LTD.	WILLIAMS LAKE	6.0	30.0	0.2		4.2	93.4	39.0	18.6
5	11087	H. WILLIAMSON BLACKTOP AND LANDSCAPING LT	VARIOUS LOCATIONS	20.8	19.7	159.9		15.3	52.6	7.4	0.4
5	11178	CARIBOO POLE & PILING LIMITED	LAC LA HACHE	4.2	0.0	0.0		0.4	0.6	0.4	0.3
5	11223	TNL PAVING LTD.	VARIOUS	21.0	19.9	32.0		15.5	22.1	3.1	0.2
5	11503	YCS HOLDINGS LTD.	VARIOUS, NORTHERN INTERIOR	1.2	1.1	1.8		0.9	10.7	2.3	0.5
5	11536	CARIBOO REWIND LTD.	WILLIAMS LAKE						0.4	0.2	0.2
5	11706	AINSWORTH LUMBER CO. LTD.	100 MILE HOUSE	6019.9	170.9	37.7			386.2	218.9	73.7
5	11853	NAZKO INDIAN BAND	TWO MILE FLAT, QUESNEL						1.5	0.6	0.3
5	12080	GOLDEN TREE LUMBER INC.	QUESNEL	0.0	0.0	0.0		0.0	0.0	0.0	0.0
5	12255	BALL, FRED AND GEIER, JERRY	OLD SODA CR. RD. - WILLIAMS LAKE	0.0	0.2	0.0		0.0	0.0	0.0	0.0
5	12259	NIJJAR, PAL	FRIZZI RD. - WILLIAMS LAKE						7.8	3.1	1.6
5	12349	BOURDON, KEVIN	MACALISTER	0.3	0.0	0.0		0.0	0.7	0.3	0.1
5	12474	HARMAN, WILLIAM	LONE BUTTE	1.6	0.0	0.0		0.1	0.4	0.4	0.4
5	12507	WEST FRASER ELECTRO/MECHANICAL LTD.	WILLIAMS LAKE						0.2	0.1	0.1
5	12592	PINNACLE WOOD PRODUCTS LTD.	QUESNEL - HWY. 97						45.4	18.1	9.1
5	12595	HILL & SONS CUSTOM PLANING LTD.	FRIZZI RD., WILLIAMS LAKE						8.1	3.2	1.6
5	12950	DICKINSON, CLARENCE	LAC LA HACHE	4.6	0.0	0.0		0.4	0.8	0.3	0.2
5	13296	M.W.Z. LOG PEOPLE LTD.	SCUFFI RD. 105 MILE	32.0	0.2	0.0		2.7	5.9	2.2	1.4
5	13326	P. SCHECK INDUSTRIAL ELECTRIC LTD.	HWY. 97 QUESNEL								
5	13444	WEST FRASER MILLS LTD.	QUESNEL						201.8	139.2	85.8
5	13658	KINROSS GOLD CORPORATION	QUESNEL - 58 KM SOUTHEAST OF	165.3	220.4	46.3		7.7	0.2	0.1	0.1
5	13967	WOOD MARKETING B.C. INC.	MIOCENE	5.2	0.0	0.0		0.4	1.3	1.3	1.3
6	1543	NORTHWOOD PULP AND TIMBER LIMITED	HOUSTON	8979.8	94.2	13.6		743.0	1492.8	869.3	641.3
6	1691	PACIFIC INLAND RESOURCES LTD.	SMITHERS	1144.8	8.8	0.9		118.0	593.9	275.4	153.4
6	1884	REPAP SMITHERS INC	SMITHERS	0.7	3.3	0.0		9.6	81.8	38.4	16.8
6	2198	BELL POLE CO. LTD.	TERRACE	1072.5	8.3	0.8		90.8	118.2	67.2	50.2
6	2288	KENTRON CONSTRUCTION LTD.	KITIMAT	3.7	3.5	5.6		2.7	41.3	5.8	0.3
6	2399	PLACER DOME CANADA LIMITED	ENDAKO	0.1	0.8	1691.9		0.0	514.9	0.0	0.0
6	2552	ALCAN SMELTERS AND CHEMICALS LIMITED	KITIMAT	18.0	84.0	1713.0		4.2	2398.0	2093.0	1713.0
6	2567	CASSIAR MINING CORPORATION	CASSIAR	1.3	6.0	0.4		0.4	0.4	0.4	0.4
6	3008	WEST FRASER MILLS LTD	TERRACE	3.7	18.6	0.1		3.1	287.1	116.1	57.4
6	3010	SKEENA CELLULOSE INC.	TERRACE	1.8	9.1	0.1		4.1	373.2	151.3	74.5
6	3019	DECKER LAKE FOREST PRODUCTS LIMITED	PALLING	3712.0	34.8	2.9		325.3	620.0	340.1	237.8
6	3083	WEST FRASER MILLS LTD	KITIMAT	3888.0	404.0	1242.0	167.0	137.0	1755.0	1597.0	1275.4
6	3192	CANADIANOXY INDUSTRIAL CHEMICALS LIMITED	PRINCE RUPERT								
6	3330	I C I CONEX EXPLOSIVES	ENDAKO	0.2	0.0	0.0		0.0	0.0	0.0	0.0
6	3547	SKEENA CELLULOSE INC.	PT. EDWARD			2500.0	3.3		2430.0	2082.4	1712.7
6	3732	L.B. PAVING LTD.	SMITHERS	1.2	1.3	2.2		0.9	37.3	8.4	2.0
6	4122	BABINE FOREST PRODUCTS LIMITED	BURNS LAKE	3867.1	38.1	5.2		353.7	706.5	383.2	251.4

Point Source Emissions by Source (page 13 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
6	4171	KITWANGA LUMBER CO. LTD.	KITWANGA	500.5	3.9	0.4		42.4	85.3	45.7	32.5
6	4197	VEENSTRA SAWMILLS LTD.	TATLOW ROAD, SMITHERS	21.6	0.2	0.0		1.8	3.3	1.8	1.3
6	4470	J. S. MCMILLAN FISHERIES LTD.	PRINCE RUPERT	0.2	1.1	0.0		0.1	17.0	1.3	0.1
6	4474	EQUITY SILVER MINES LIMITED	HOUSTON						0.3	0.1	0.0
6	4475	EQUITY SILVER MINES LIMITED	HOUSTON								
6	4625	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	DEASE LAKE	34.4	158.0	10.5		10.8	11.3	11.3	10.6
6	4626	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	ATLIN	17.0	78.1	5.2		5.3	5.6	5.6	5.2
6	4628	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	TELEGRAPH CREEK	11.7	53.6	3.6		3.7	3.8	3.8	3.6
6	4629	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	ISKUT	13.7	62.9	4.2		4.3	4.5	4.5	4.2
6	4641	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	MASSET	165.2	649.3	174.9		20.5	62.5	52.5	45.0
6	4644	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	SANDSPIT								
6	5339	HOUSTON FOREST PRODUCTS COMPANY	HOUSTON	3921.5	41.2	5.9		358.9	837.5	426.4	269.1
6	5424	RIVTOW STRAITS LIMITED	PRINCE RUPERT						1.1	0.6	0.2
6	5543	COPPER MOUNTAIN CEDAR PRODUCTS LTD.	TERRACE	153.8	1.2	0.1		13.0	16.6	9.1	6.6
6	5685	Q.C.I. SAWMILLS LTD.	MASSET	131.2	1.0	0.1		11.1	20.2	11.1	8.1
6	5710	TILBURY CEMENT LIMITED	KITIMAT						0.3	0.2	0.1
6	5773	MACMILLAN BLOEDEL LIMITED	FERGUSON BAY, QCI	1518.4	11.7	1.2		128.5	373.8	373.8	373.8
6	5849	TENAJON RESOURCES CORP.	STEWART	0.0	0.0	0.0		0.0	0.1	0.0	0.0
6	5901	INTERNATIONAL FOREST PRODUCTS LIMITED	SKEENA/SCOTIA RIVERS								
6	6008	METHANEX CORPORATION	KITIMAT	83.6	416.5	2.4		22.2	13.3	8.3	6.0
6	6046	CONTINENTAL GRAIN COMPANY CANADA LTD.	PRINCE RUPERT						16.1	6.8	1.7
6	6055	ADVENTURE PAVING LIMITED	PRINCE RUPERT	0.3	0.3	2.7		0.2	15.8	3.6	0.9
6	6099	NORTHWEST PANELBOARD (1994)	SMITHERS	490.1	14.0	3.1		34.6	226.8	119.9	94.1
6	6159	HOUSTON FOREST PRODUCTS COMPANY	HOUSTCN	4.9	0.0	0.0		0.4	1.2	1.2	1.2
6	6221	INTERNATIONAL TAURUS RESOURCES LTD.	CASSIAR	15.4	70.7	4.7		4.8	103.0	61.1	44.4
6	6280	AMAX OF CANADA LIMITED	KITSAULT								
6	6314	PINE CREEK SAWMILLS	SMITHERS	109.9	0.8	0.1		9.3	16.9	9.3	6.8
6	6686	PACIFIC NORTHERN GAS LTD.	TELKWA	49.7	124.3	0.3		25.2	5.8	5.8	5.8
6	6687	PACIFIC NORTHERN GAS LTD.	BURNS LAKE	50.5	126.5	0.3		26.6	5.9	5.9	5.9
6	6699	RIDLEY TERMINALS INCORPORATED	PRINCE RUPERT						338.4	172.6	50.8
6	6741	PRINCE RUPERT GRAIN LIMITED	PRINCE RUPERT						214.0	81.9	20.9
6	6884	ALCAN SMELTERS AND CHEMICALS LIMITED	KITIMAT	0.8	4.1	0.0		0.2	109.1	20.0	11.7
6	6887	HUSBY FOREST PRODUCTS LTD.	NADEN HARBOUR	111.0	0.9	0.1		9.4	27.3	27.3	27.3
6	7064	WESTERN FOREST PRODUCTS LIMITED	SEWELL INLET	104.0	0.8	0.1		8.8	25.6	25.6	25.6
6	7152	HOUSTON FOREST PRODUCTS COMPANY	GRANISLE	6.2	0.0	0.0		0.5	1.5	1.5	1.5
6	7156	PRINCE RUPERT HARBOUR DEBRIS SOCIETY	PRINCE RUPERT	8.2	0.1	0.0		0.7	2.0	2.0	2.0
6	7184	INTERNATIONAL FOREST PRODUCTS LIMITED	KUMEALON INLET	104.2	0.8	0.1		9.0	25.8	25.6	25.6
6	7189	CHEMICAL LIME COMPANY OF CANADA LTD	TOPLEY						0.4	0.2	0.1
6	7331	BYTOWN DIESEL SALES LTD.	TERRACE								
6	7338	REGIONAL RESOURCES LTD.	RANCHERIA	1.1	5.3	0.4		0.4	0.4	0.4	0.4
6	7683	MACMILLAN BLOEDEL LIMITED	ALLIFORD BAY	234.0	1.8	0.2		19.8	57.6	57.6	57.6
6	7685	BABINE FOREST PRODUCTS LIMITED	BURNS LAKE	93.5	0.7	0.1		7.9	23.0	23.0	23.0
6	7748	REPAP CARNABY INC.	CARNABY CROSSING, S. HAZELTON	5575.5	42.9	4.3		471.8	1395.0	767.5	558.5
6	7864	REPAP CARNABY INC.	NEW HAZELTON	5198.4	40.0	4.0		439.9	568.1	312.9	228.0
6	7865	L B PAVING LTD.	MOBILE: BCE-100, #470	9.2	14.4	59.7		6.2	41.3	9.7	2.7
6	7923	YCS HOLDINGS LIMITED	TERRACE	0.3	0.3	0.4		0.2	31.6	4.5	0.3
6	7927	SKYLINE GOLD CORPORATION	JOHNNY MTN/ISKUT GOLD CAMP	0.0	0.1	0.0		0.0	0.8	0.3	0.2
6	7928	SKYLINE GOLD CORPORATION	JOHNNY MTN./ISKUT GOLD CAMP	319.5	1469.0	97.7		100.5	153.8	128.8	114.3
6	7987	LOMAK TRANSPORT CORPORATION	TERRACE								
6	8041	ORENDA FOREST PRODUCTS LTD.	MEZIADIN JUNCTION	292.4	2.2	0.2		24.7	72.0	72.0	72.0
6	8116	NORTH AMERICAN METALS CORP	DEASE LAKE-135 KM WEST	2.5	0.2	0.1		0.2	2.2	1.2	1.0
6	8119	COMINCO LIMITED	ISKUT RVR.	26.1	0.4	0.1		2.2	8.9	8.9	8.9

Point Source Emissions by Source (page 14 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
6	8224	ALCAN SMELTERS AND CHEMICALS LIMITED	WACHWAS CREEK	1.3	1.7	0.7		0.6	5.7	4.2	3.5
6	8226	EASTEND HOLDINGS	THORNHILL						0.8	0.4	0.1
6	8620	NORTH AMERICAN METALS CORP	MUDDY LAKE								
6	8854	ALCAN SMELTERS AND CHEMICALS LIMITED	KEMANO	10.9	0.1	0.0		0.9	2.7	2.7	2.7
6	9073	ALL WEST TRADING CO	STEWART	260.0	2.0	0.2		22.0	64.0	64.0	64.0
6	10849	FINNING LTD.	HOUSTON								
6	11055	TERRACE PRE-CUT MILL LTD.	TERRACE						3.8	1.5	0.8
6	11195	ALL WEST TRADING CO	STEWART	156.0	1.2	0.1		13.2	38.4	38.4	38.4
6	11422	TERRACE REDI-MIX LTD.	TERRACE						0.0	0.0	0.0
6	11527	EAST END HOLDINGS	TERRACE						0.1	0.0	0.0
6	11619	SHEPPARD, ALAN T.	PORT EDWARD	12.4	0.1	0.0		1.0	3.0	3.0	3.0
6	11669	TIMBERWEST FOREST LIMITED	SOUTH BAY MORESBY ISLAND	416.0	3.2	0.3		35.2	102.4	102.4	102.4
6	12018	WESTERN FOREST PRODUCTS LIMITED	RODERICK ISLAND	147.6	1.1	0.1		12.5	36.3	36.3	36.3
6	12038	LAKALZAP INDIAN BAND	GREENVILLE	2.7	0.0	0.0		0.2	0.7	0.7	0.7
6	12099	ISOLITE STEGE FOREST PRODUCTS CO. LTD.	SOUTH HAZELTON	439.5	12.5	2.8		38.9	91.8	39.2	18.5
6	12888	BOO FLAT LUMBER LIMITED	LOT 811, RANGE 5,COAST DISTRICT	8.2	0.1	0.0		0.7	2.0	2.0	2.0
6	13260	FORWEST WOOD SPECIALTIES INC.	5402 HIGHWAY 16 WEST						13.9	5.6	2.8
6	13415	MERKLEY ENTERPRISES	HOUSTON BC	2.7	0.0	0.0		0.2	0.7	0.7	0.7
6	13655	SJODEN, CARL P.	HOUSTON	8.2	0.1	0.0		0.7	2.0	2.0	2.0
6	13757	CUSAC INDUSTRIES LTD	10 KM N OF DEASE LAKE	27.0	124.0	8.2		8.5	14.0	11.1	8.7
7	1555	WESTCOAST ENERGY INC.	FORT NELSON	202.4	1350.0	10014.2	10.1	49.1	102.3	102.3	98.2
7	1644	FLETCHER CHALLENGE CANADA LIMITED	MACKENZIE-PULP MILL	2800.0	379.6	34.3	39.3	134.5	513.7	310.6	242.4
7	1675	THE PAS LUMBER COMPANY LIMITED	BEAR LAKE	9424.1	72.5	7.2		797.4	1455.4	800.8	582.6
7	1676	FLETCHER CHALLENGE CANADA LIMITED	MACKENZIE-SAWMILL	8226.7	513.0	9.0		758.9	1572.6	839.5	560.2
7	1699	NORTHWOOD PULP AND TIMBER LIMITED	PRINCE GEORGE	1.8	9.1	0.1		32.5	317.3	144.3	62.5
7	1722	FINLAY FOREST INDUSTRIES INC.	MACKENZIE INDUSTRIAL SITE #2	8366.3	83.1	6.5		737.1	1511.1	812.9	558.7
7	1730	L AND M LUMBER LTD.	VANDERHOOF	15953.6	122.7	12.3		1349.9	2458.1	1351.4	982.5
7	1742	WESTCOAST ENERGY INC.	TAYLOR	94.5	378.0	4332.1	10.4	109.6	20.5	18.5	14.6
7	1772	STELLA-JONES INC.	PRINCE GEORGE-BCR SITE	132.2	5.9	0.1		11.4	17.3	9.1	6.4
7	1778	CANADIAN FOREST PRODUCTS LTD.	PRINCE GEORGE - BCR SITE	8363.0	99.5	12.1		712.8	1526.7	771.3	535.6
7	1780	WESTCOAST ENERGY INC.	BOUNDARY	0.2	0.9		1.5	13.1	0.0	0.0	
7	1787	RUSTAD BROS. AND CO. LTD.	PRINCE GEORGE - BCR SITE	11171.0	98.6	12.0		972.5	1981.1	1050.7	720.9
7	1796	THE PAS LUMBER COMPANY LIMITED	PRINCE GEORGE - CNR SITE	1333.8	26.5	5.4		146.5	400.6	187.3	91.8
7	1832	WEST HILL LUMBER (1988) LTD.	PRINCE GEORGE - OTWAY ROAD	116.8	6.9	0.1		14.3	32.0	17.8	9.8
7	1865	WESTCOAST ENERGY INC.	MACKIE CREEK - CS N5	32.2	20.2			0.9	7.1	7.1	7.1
7	1866	WESTCOAST ENERGY INC.	SIKANNI CHIEF - CS N3	5.7	9.6			0.4	0.9	0.9	0.9
7	1869	LAKELAND MILLS LTD.	PRINCE GEORGE-CNR SITE	1143.5	32.5	7.2		106.4	282.7	213.7	153.0
7	1934	PRINCE GEORGE PRECUT LIMITED	CNR INDUSTRIAL SITE						73.1	29.2	14.6
7	1955	CANADIAN FOREST PRODUCTS LIMITED	CHETWYND	8222.2	94.4	6.5		727.0	1490.6	803.7	551.9
7	2065	HUSKY OIL OPERATIONS LTD.	PRINCE GEORGE	5002.6	92.0	4505.1		146.7	90.4	64.0	37.5
7	2119	WESTCOAST ENERGY INC.	PRINCE GEORGE - BCR SITE	0.6	3.1	232.2		0.2	6.0	3.2	1.9
7	2168	IMPERIAL OIL, A PARTNERSHIP OF IMPERIAL LIMI	GOODLOW	5.5	43.2	184.1		1.1	0.1	0.1	0.1
7	2190	CANADIAN FOREST PRODUCTS LIMITED	ISLE PIERRE	7100.7	61.1	7.2		616.4	1348.3	708.0	483.4
7	2268	CANADIAN FOREST PRODUCTS LIMITED	FORT ST. JAMES	10418.2	97.1	8.1		913.8	1782.0	972.5	678.8
7	2376	WESTCOAST ENERGY INC.	FORT NELSON	6.4	0.0	0.0		0.5	1.6	1.6	1.6
7	2396	REVELSTOKE CONCRETE INC.	DAWSON CREEK						0.4	0.2	0.1
7	2559	NORTHWOOD PULP AND TIMBER LIMITED	PRINCE GEORGE	7881.5	454.0	1119.6	39.7	359.5	1599.2	1491.7	1206.3
7	2650	SILBERBERGER ENTERPRISES LTD.	VANDERHOOF HWY 16E	156.0	1.2	0.1		13.2	24.0	13.2	9.6
7	2684	SLOCAN GROUP - PLATEAU DIVISION	ENGEN-NEAR VANDERHOOF	6759.3	114.5	5.6		630.3	1287.1	701.1	463.3
7	2724	WESTCOAST ENERGY INC.	SUMMIT LAKE CS 4A	126.4	33.2			2.0	30.4	30.4	30.4
7	2731	FEDERATED PIPELINES (WESTERN)LTD.	TAYLOR	17.0	134.8	0.0		4.2	0.4	0.4	0.4
7	2734	FEDERATED PIPELINES (WESTERN)LTD.	WILLOW FLATS	18.5	46.2	0.1		1.3	2.2	2.2	2.2

Point Source Emissions by Source (page 15 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
7	2735	WESTCOAST ENERGY INC.	AZOUZETTA LAKE - CS 2B	114.4	31.3			1.8	27.4	27.4	27.4
7	2736	WESTCOAST ENERGY INC.	WILLOW FLATS - CS 2	192.1	64.7			3.5	45.5	45.5	45.4
7	2737	WESTCOAST ENERGY INC.	TAYLOR - BS 1 / CS 1	454.2	2786.6		1.4	100.5	31.8	31.8	24.4
7	2740	FEDERATED PIPELINES (WESTERN)LTD.	MCLEOD LAKE	18.2	45.5	0.1		1.7	2.1	2.1	2.1
7	2747	HAUER BROS. LUMBER LTD.	TETE JAUNE CACHE	638.2	4.9	0.5		54.0	98.2	54.0	39.3
7	2754	WESTCOAST ENERGY INC.	HIXON - CS 4B	136.9	30.3			2.1	32.9	32.9	32.9
7	2755	WESTCOAST TRANSMISSION COMPANY LIMITED	MCLEOD LAKE - CS 3	130.7	43.5			2.5	30.7	30.7	30.7
7	2761	CANADIAN FOREST PRODUCTS LTD.	PRINCE GEORGE PULP & PAPER	3817.7	334.0	14.6	60.1	164.6	580.2	552.6	443.8
7	2762	INTERCONTINENTAL PULP COMPANY LTD.	PRINCE GEORGE	2665.3	230.7	356.4	14.1	168.9	283.8	257.8	213.7
7	2802	NEWCAL ENERGY INC	ALASKA HIGHWAY-MILE 91	0.8	3.2	9.4		0.1	0.1	0.1	0.0
7	3016	B.C. CHEMICALS LTD.	PRINCE GEORGE	0.3	1.5	0.0	0.7	0.1	0.0	0.0	0.0
7	3027	NORTHWOOD PULP AND TIMBER LIMITED	UPPER FRASER	13876.9	128.6	16.5		1206.6	1818.2	952.4	640.7
7	3032	CANADIAN FOREST PRODUCTS LTD.	TAYLOR	5317.3	94.1	4.4		463.1	907.5	492.8	345.8
7	3034	CANADIAN FOREST PRODUCTS LTD.	BEAR LAKE	5915.5	79.4	7.5		515.9	1046.1	551.5	376.1
7	3057	FINLAY FOREST INDUSTRIES INC.	MACKENZIE - SAWMILL FFI SITE 1	9304.4	84.1	7.2		811.3	1570.0	855.4	599.5
7	3104	SLOCAN FOREST PRODUCTS LTD. AND TACKAMA	CEDARSIDE - NEAR VALEMOUNT	5706.9	51.1	4.4		497.6	975.9	533.7	370.1
7	3133	NECHAKO LUMBER CO. LTD.	VANDERHOOF	7803.5	70.4	8.8		674.7	1273.2	685.6	479.5
7	3335	APOLLO FOREST PRODUCTS LIMITED	FORT ST JAMES	1454.6	19.5	3.3		134.8	282.4	143.5	88.9
7	3336	CANADIAN FOREST PRODUCTS LIMITED	PRINCE GEORGE - BLACKWATER RD.	5841.7	53.6	6.4		513.4	1023.5	548.7	373.4
7	3337	STUART LAKE LUMBER CO. LTD.	FORT ST JAMES	6115.9	48.9	4.7		530.4	1003.1	549.4	389.1
7	3387	REGIONAL DISTRICT OF BULKLEY-NECHAKO	VANDERHOOF LANDFILL	60.1	0.5	0.0		5.1	14.8	14.8	14.8
7	3403	CHETWYND FOREST INDUSTRIES	CHETWYND	6539.9	57.8	49.8		574.6	1247.2	661.2	434.3
7	3406	ZEIDLER FOREST INDUSTRIES LTD.	MCBRIDE	397.6	4.7	0.7		32.5	78.3	42.4	29.8
7	3435	MOBIL OIL CANADA	ALASKA HIGHWAY - MI. 98	0.2	0.7	4.8		0.0	0.0	0.0	0.0
7	3437	CANADIAN NATURAL RESOURCES LIMITED	ALASKA HIGHWAY - MI. 91	8.0	60.9	55.0		1.5	0.2	0.2	0.2
7	3448	WESTCOAST ENERGY INC.	BLUEHILLS - BS 6	54.8	219.3	21.5	1.5	18.9	6.2	6.2	0.0
7	3449	WESTCOAST ENERGY INC.	RIGEL - BS 11	22.6	11.1		2.2	23.1	2.0	2.0	
7	3450	WESTCOAST ENERGY INC.	CYPRESS - CS N4	83.5	28.8			1.6	19.7	19.7	19.7
7	3451	WESTCOAST ENERGY INC.	BUICK - BS 4	29.3	4.9		1.7	19.3	2.0	2.0	
7	3452	WESTCOAST ENERGY INC.	STODDART - BS 10	30.4	56.2		1.7	19.4	2.1	2.1	
7	3453	WESTCOAST ENERGY INC.	BUBBLES - BS 7	3.8	0.7		1.2	11.3	0.3	0.3	
7	3454	WESTCOAST ENERGY INC.	PROPHET RIVER N2	74.0	29.4			1.4	17.4	17.4	17.4
7	3455	WESTCOAST ENERGY INC.	LAPRISE - BS 8	80.0	297.9		2.0	28.3	5.5	5.5	
7	3456	WESTCOAST ENERGY INC.	NIG CREEK - BS 9	26.0	39.6		1.5	16.5	1.8	1.8	
7	3457	WESTCOAST ENERGY INC.	KOBES - BS 3	99.5	496.8		1.7	28.6	6.9	6.9	
7	3478	CANADIAN FOREST PRODUCTS LIMITED	FORT ST. JOHN	7002.3	77.5	5.5		610.4	1137.5	627.2	444.4
7	3647	FINLAY FOREST INDUSTRIES INC.	MACKENZIE	30.6	421.3	0.5		1.3	29.0	12.1	6.4
7	3694	IMPERIAL OIL, A PARTNERSHIP OF IMPERIAL LIMI	MACKENZIE INDUSTRIAL SITE					24.0			
7	3845	COLUMBIA BITULITHIC LIMITED	PRINCE GEORGE	2.2	2.1	3.4		1.6	50.0	7.1	0.4
7	3898	DUNKLEY LUMBER LIMITED	STRATHNAVER	3390.7	37.3	2.7		305.3	681.3	360.4	239.8
7	3936	TILBURY CEMENT LIMITED	PRINCE GEORGE - BCR SITE						0.3	0.1	0.0
7	4044	WESTCOAST ENERGY INC.	SIPHON - BS 14	49.6	247.3		1.5	19.7	3.4	3.4	
7	4081	REGIONAL DISTRICT OF BULKLEY-NECHAKO	FORT ST. JAMES LF	0.8	0.0	0.0		0.1	0.2	0.2	0.2
7	4089	NETHERLAND OVERSEAS MILLS	LEO CR. ON TAKLA LAKE						1.2	0.7	0.6
7	4131	PETRO-CANADA EXPLORATION INC.	FORT ST JOHN-KM66 ALASKA HWY					11.1			
7	4132	PETRO-CANADA EXPLORATION INC.	TAYLOR	0.8	6.4	0.0		0.2	0.0	0.0	0.0
7	4206	SLOCAN GROUP - TACKAMA DIVISION	MILE 294 ALASKA HIGHWAY	3535.8	27.2	2.7		299.2	380.8	209.4	152.3
7	4489	BRITISH COLUMBIA HYDRO AND POWER AUTHOR	FORT NELSON	0.5	2.4	0.0		0.1	0.1	0.1	0.1
7	4530	NORTHWOOD PULP AND TIMBER LIMITED	PRINCE GEORGE	5.6	27.0	0.2		24.8	114.6	96.3	90.2
7	4607	PEMBINA RESOURCES	ALASKA HIGHWAY - MI. 98	0.1	0.3	1.8		0.0	0.0	0.0	0.0
7	4618	TEXACO CANADA PETROLEUM INC. 10012 97TH A	RIGEL	16.8	132.1	51.4		3.3	0.4	0.4	0.4
7	4680	CARRIER LUMBER LTD.	BCR INDUSTRIAL SITE	2399.1	30.3	1.9		229.7	476.4	260.1	168.2

Point Source Emissions by Source (page 16 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
7	4817	CANADIAN NATURAL RESOURCES LIMITED	BUICK CREEK	1.7	13.3	0.0		0.3	0.0	0.0	0.0
7	4999	NORTHWOOD PULP AND TIMBER LIMITED	SHELLEY	1.3	0.0	0.0		0.1	0.3	0.3	0.3
7	5051	AREND FOREST PRODUCTS LTD.	PRINCE GEORGE								
7	5056	SCEPTRE RESOURCES LIMITED	GRIZZLY VALLEY	0.2	0.8	5.7		0.0	0.0	0.0	0.0
7	5057	SCEPTRE RESOURCES LIMITED	GRIZZLY VALLEY	13.3	102.6	43.2		2.5	0.3	0.3	0.3
7	5058	SCEPTRE RESOURCES LIMITED	GRIZZLY VALLEY	19.8	150.5	4.8		3.9	0.7	0.7	0.7
7	5059	SCEPTRE RESOURCES LIMITED	GRIZZLY VALLEY	0.0	0.0	0.0		0.0	0.1	0.0	0.0
7	5151	WESTCOAST ENERGY INC.	HASLER FLATS	124.9	307.0	19347.0	47.2	34.6	22.4	22.4	19.9
7	5153	CHEVRON CANADA LIMITED	BCR SITE					74.5			
7	5260	PETRO-CANADA	PRINCE GEORGE					191.6			
7	5286	SKI LUMBER LIMITED	VALEMOUNT	79.3	0.6	0.1		6.7	12.2	6.7	4.9
7	5364	TALISMAN ENERGY INC.	SUKUNKA	12.9	87.6	1222.8		2.1	0.5	0.4	0.4
7	5365	TALISMAN ENERGY INC.	BULLMOOSE	2.1	16.5	3650.0		103.4	0.0	0.0	0.0
7	5375	RUSTAD BROS. & CO. LTD. (P.G. WOOD DIVISION)	PRINCE GEORGE - BCR SITE	3927.6	38.1	3.1		346.9	663.7	363.9	253.1
7	5413	B.C. STAR PARTNERS	RIGEL	24.1	189.6	59.0		4.6	0.6	0.6	0.6
7	5444	TEXACO CANADA PETROLEUM INC. 10012 97TH A	RIGEL	0.0	0.1	2.3		131.8	0.0	0.0	0.0
7	5448	B.C. STAR PARTNERS	RIGEL	0.0	0.1	2.0		131.8	0.0	0.0	0.0
7	5449	B.C. STAR PARTNERS	RIGEL GAS FIELD	0.0	0.1	0.7		65.9	0.0	0.0	0.0
7	5531	PETRO-CANADA EXPLORATION INC.	SIPHON CREEK		0.0	0.1					
7	5625	ENSO FOREST PRODUCTS AND WEST FRASER MI	LEJAC	10047.3	97.7	13.2		887.0	1802.2	951.1	639.1
7	5626	YCS HOLDINGS LIMITED	MOBILE ASPHALT PLANT	7.3	14.4	41.2		4.5	14.5	2.6	0.7
7	5738	PETRO-CANADA EXPLORATION INC.	MONTNEY	7.9	62.0	1.2		1.5	0.2	0.2	0.2
7	5739	PETRO-CANADA EXPLORATION INC.	NORTH PINE	15.1	119.3	1.2		2.9	0.4	0.4	0.4
7	5769	ACE ASPHALTS AND MAINTENANCE PROD. LTD.	TAYLOR		0.0			0.0			
7	5807	SABLE RESOURCES LTD.	BAKER MINE	10.9	50.0	14.5		3.3	13.2	4.2	2.5
7	5808	SABLE RESOURCES LTD.	BAKER MINE	0.2	0.3	0.1		0.0	3.2	2.8	2.7
7	5832	HOME OIL COMPANY LIMITED	MONTNEY 14-34-85-20	3.4	24.0	28.1		0.6	0.1	0.1	0.1
7	5842	PETRO-CANADA EXPLORATION INC.	MONTNEY	0.0	0.1	0.0		0.0	0.0	0.0	0.0
7	5942	D.G. SMITH ENGINEERING LTD.	BARBER GREENE MODEL 896 BATCH PLANT - 896X	1.4	4.8	5.5		0.6	6.5	1.7	0.6
7	6108	COLUMBIA BITULITHIC LIMITED	MOBILE: BCE-MS400 #565	3.6	16.3	2.0		1.1	29.7	5.1	1.3
7	6118	REVELSTOKE CONCRETE INC.	FORT ST JOHN						0.1	0.0	0.0
7	6207	FINLAY FOREST INDUSTRIES INC.	MACKENZIE SITE 2	6.7	0.1	0.0		0.6	1.7	1.7	1.7
7	6297	OCEAN CONSTRUCTION SUPPLIES LIMITED	PRINCE GEORGE						0.6	0.3	0.1
7	6321	WESTCOAST ENERGY INC.	HASLER FLATS	0.0	0.0	0.0		0.0	0.3	0.1	0.1
7	6401	D.G. SMITH ENGINEERING LTD.	MOBILE: MAD-MODEL 4000 #331	0.8	1.7	55.4		0.4	78.4	11.1	0.7
7	6505	WOODLAND WINDOWS LTD.	PRINCE GEORGE - BCR SITE	20.2	0.6	0.1		3.0	7.8	5.5	3.2
7	6556	ROLLING MIX CONCRETE B.C. LIMITED	PRINCE GEORGE - OTWAY RD						0.2	0.1	0.1
7	6683	QUINTETTE COAL LIMITED	TUMBLER RIDGE		361.8	671.8		258.4	619.0	435.0	165.8
7	6690	PACIFIC NORTHERN GAS LTD.	VANDERHOOF	53.6	134.1	0.3		17.4	6.3	6.3	6.3
7	6695	PACIFIC NORTHERN GAS LTD.	SUMMIT LAKE	100.9	252.4	0.5		25.0	11.8	11.8	11.8
7	6754	LAFARGE CANADA INC.	PRINCE GEORGE						0.6	0.3	0.1
7	6846	BULLMOOSE OPERATING CORPORATION LTD.	TUMBLER RIDGE		96.3	60.2		63.7	214.4	146.7	59.7
7	6864	SLOCAN GROUP - PLATEAU DIVISION	ENGEN-NEAR VANDERHOOF	84.2	0.6	0.1		7.1	20.7	20.7	20.7
7	6917	SCURRY-RAINBOW OIL LIMITED	CECIL LAKE, 10KM NE OF FORT ST. JOHN	7.3	56.6	25.6		1.4	0.2	0.2	0.2
7	6950	HOME OIL COMPANY LIMITED	EAST EAGLE OIL FIELD-13KM N. OF FORT ST. JOH	4.1	31.5	14.6		0.8	0.1	0.1	0.1
7	6951	SCURRY-RAINBOW OIL LIMITED	FORT ST JOHN	13.0	96.2	72.7		2.3	0.4	0.4	0.4
7	6952	TUMBLER RIDGE, DISTRICT OF	TUMBLER RIDGE								
7	7020	NORTHLAND UTILITIES B.C. LIMITED	SOUTHEAST OF TUMBLER RIDGE	0.5	2.4	7300.0		38.0	0.1	0.0	0.0
7	7258	SOLEX DEVELOPMENTS COMPANY INC.	TAYLOR	4.6	18.6	0.1		0.4	0.4	0.2	0.2
7	7368	D. HALL AND ASSOCIATES	LAPRISE	0.0	0.0	0.0		0.0	0.0	0.0	0.0
7	7419	THE PAS LUMBER COMPANY LIMITED	BEAR LAKE	12.3	0.1	0.0		1.0	3.0	3.0	3.0
7	7483	WEST FRASER MILLS LTD.	LEJAC	32.0	0.2	0.0		2.7	7.9	7.9	7.9

Point Source Emissions by Source (page 17 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
7	7520	KERR-MCGEE CANADA LTD.	STODDARD - 40 KM N.W. OF FT. ST. JOHN	37.5	291.2	117.0		7.1	1.0	0.9	0.9
7	7521	PEMBINA RESOURCES	ALASKA HIGHWAY - MI. 98	0.0	0.2	2.4		0.0	0.0	0.0	0.0
7	7525	WESTCOAST ENERGY INC.	SIKANNI CHIEF	61.6	250.0	27.2		32.4	4.3	4.3	4.3
7	7526	PRINCE GEORGE REGIONAL HOSPITAL	PGRH INCINERATOR	1.1	1.4	0.5		0.5	0.8	0.6	0.5
7	7528	CONTINENTAL LIME LTD.	BCR SITE-PRINCE GEORGE						0.5	0.3	0.2
7	7596	LOUISIANA-PACIFIC CANADA LTD.	DAWSON CREEK	825.9	8.1	1.1		68.7	140.9	76.7	47.7
7	7671	LIQUID CARBONIC INC.	PRINCE GEORGE								
7	7672	WESTCOAST ENERGY INC.	SIKANNI CHIEF		0.0	0.0		0.0	0.0	0.0	0.0
7	7678	FORT ST. JAMES FOREST PRODUCTS LTD	FORT ST JAMES - 7 KM NE	390.0	3.0	0.3		33.0	60.0	33.0	24.0
7	7774	FRASER-FORT GEORGE REGIONAL DISTRICT	MACKENZIE HOSPITAL INCINERATOR	1.0	0.1	0.1		0.0	0.1	0.1	0.1
7	7775	RORISON ENTERPRISES LTD.	MOBILE PLANT	26.0	110.7	73.5		8.4	95.8	19.8	7.3
7	7778	WESTCOAST ENERGY INC.	MONIAS - BS 17	0.0	0.1		1.2	10.8	0.0	0.0	
7	7779	FIBRECO PULP INC.	TAYLOR	27.2	136.1	0.8		7.2	264.6	172.4	141.7
7	7910	WESTCOAST ENERGY INC.	BLUEHILLS - BS 6								
7	8074	DOLLAR SAVER LUMBER LTD.	PRINCE GEORGE-BCR SITE						13.6	5.4	2.7
7	8076	FLETCHER CHALLENGE CANADA LIMITED	60 KM NE OF MACKENZIE - MUNROE CR. CAMP	1.5	0.1	0.2		1.1	1.1	0.4	0.3
7	8079	SUMMIT RESOURCES LIMITED	ALASKA HIGHWAY - KM. 280	0.1	0.6	484.2		0.0	0.0	0.0	0.0
7	8211	AMERADA HESS CANADA LTD.	BOUNDRY LAKE	10.9	86.0	0.1		54.4	0.0	0.0	0.0
7	8212	AMOCO CANADA PETROLEUM COMPANY LTD.	CYPRESS GAS FIELD	5.2	38.9	729.6	15.9	123.4	0.2	0.2	0.2
7	8280	BATER ELECTRIC 1983 LTD.	PRINCE GEORGE	0.0	0.0			0.0	0.0		
7	8295	WEST FRASER ELECTRICAL SERVICES LIMITED G	PRINCE GEORGE	0.0	0.0			0.0	0.0		
7	8452	NORTHWOOD PULP AND TIMBER LIMITED	HERRICK ROAD - KILOMETRE 15	0.1	0.1	0.0		0.0	1.1	0.4	0.3
7	8456	PITTMAN ASPHALT	PRINCE GEORGE	0.3	0.3	0.5		0.3	11.2	1.6	0.1
7	8462	UNOCAL CANADA LIMITED	WONOWON-15 KM N.E.	166.1	871.1	0.2		32.0	3.9	3.9	3.9
7	8464	WESTCOAST ENERGY INC.	NIG CREEK - BS 9								
7	8465	ASTRO PAVING LTD.	ROVING ASPHALT PLANT	0.7	1.1	0.9		0.5	8.0	1.8	0.4
7	8466	ALCAN SMELTERS AND CHEMICALS LIMITED	KNEWSTUB LAKE CAMP	2.2	0.2	0.3		1.6	1.6	0.6	0.4
7	8543	WESTCOAST ENERGY INC.	WONOWON-15 KM. NE	56.7	231.0	31.2		23.6	4.8	4.8	4.6
7	8545	CENTRAL INTERIOR REMAN LTD.	ENGEN	12.2	0.1	0.0		1.0	2.6	2.6	2.6
7	8549	CANADIAN CHOPSTICK MANUFACTURING CO. LTD	FORT NELSON	799.1	13.4	0.7		68.8	88.9	50.3	37.4
7	8558	SERENPET INC.	MONIAS, LSD 11-13-83-21-W6M	222.9	57.0	85.8		2.5	1.7	1.7	1.7
7	8559	MORKHILL VALLEY TIMBER CO. LTD.	CRESCENT SPUR, B.C.	2297.3	17.7	1.8		194.4	583.2	320.7	233.3
7	8728	PETRO-CANADA	LILY LAKE, NEAR SIKANNI	0.0	0.1	1.0		0.0	0.0	0.0	0.0
7	8736	WISMER & RAWLINGS ELECTRIC LTD.	PRINCE GEORGE						0.0	0.0	0.0
7	8737	PETRO-CANADA	MACKENZIE								
7	8738	TALISMAN ENERGY INC.	SUKUNKA VALLEY, 60 KM S OF CHETWYND	31.2	128.3	489.1		6.1	0.9	0.9	0.9
7	8739	POCO PETROLEUMS LTD.	CECIL LAKE	3.5	27.6	0.6		0.7	0.1	0.1	0.1
7	8997	WESTCOAST GAS SERVICES INC.	SIKANNI/POCKETKNIFE AREA	3.1	22.9	0.6		0.6	0.1	0.1	0.1
7	8998	LOUISIANA-PACIFIC CANADA LTD.	20 KM. E. OF CHETWYND, NORTH OF HWY 97 ON 1	990.9	16.6	6.3	0.0	112.2	9.1	5.8	4.1
7	9032	CHENI RESOURCES INC.	TOODOGGONE MINING AREA						2.7	1.6	1.1
7	9034	FMC OF CANADA LIMITED	PRINCE GEORGE		39.0	0.2		2.1	1.2		
7	9035	CHENI RESOURCES INC.	TOODOGGONE MINING AREA	0.2	0.3	0.1		0.1	1.3	1.3	1.3
7	9036	CANADIAN NATURAL RESOURCES LTD.	WILDMINT AREA	15.9	125.3	0.0		3.1	0.4	0.4	0.4
7	9039	DIACHEM INDUSTRIES LTD.	PRINCE GEORGE						0.1	0.0	0.0
7	9040	FLETCHER CHALLENGE CANADA LIMITED	BUFFALO HEAD CAMP - FINBOW - 5 KM FROM PAU	0.1	0.1	0.0		0.0	1.0	0.4	0.3
7	9043	PETRO-CANADA	BCR SITE, PRINCE GEORGE								
7	9103	LEE-VINE HOLDINGS LTD.	12 KM SOUTH OF MACKENZIE	26.0	0.2	0.0		2.2	6.4	6.4	6.4
7	10555	UNOCAL CANADA LIMITED	ETSETT/HOSSITL AREA NE OF FT. NELSON	20.3	159.4	9.5		3.9	0.5	0.5	0.5
7	10606	VANDERHOOF SPECIALTY WOOD PRODUCTS	REDMOND PIT ROAD, VANDERHOOF	321.6	5.4	1.0		27.4	75.8	46.5	32.7
7	10852	FINNING LTD.	MCKENZIE, B.C.								
7	10941	CIRQUE OPERATING CORP.	CIRQUE MINING PROPERTY LIARD	367.1	1688.2	123.6		115.5	123.8	121.8	113.5
7	10951	AMERADA HESS CANADA LTD.	BOUNDARY LAKE GOODLOW	1.8	9.0	199.9	26.2	461.4	0.2	0.1	0.1

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
7	10955	WESTCOAST ENERGY INC.	BEG JEDNEY - BS 18	28.2	20.5		1.2	14.6	1.9	1.9	
7	10974	SULPHUR PACIFIC SERVICES LTD.	POUCE COUPE	0.0	0.0	0.3		0.0	0.0	0.0	0.0
7	11128	WESTCOAST POWER INC.	TAYLOR	1318.1	415.1	6.9		144.4	160.9	160.9	160.9
7	11181	MOHAWK OIL CO. LTD.	RANGE RD. & HWY 16 W PRINCE GEORGE					7.9			
7	11388	HEBERT, DENNIS	OTWAY ROAD PRINCE GEORGE						0.1	0.0	0.0
7	11519	VANDERHOOF CO-OPERATIVE ASSOCIATION	DISTRICT OF VANDERHOOF STORM SEWER								
7	11633	NUMAC ENERGY INC.	TOMMY LAKES - C-19-I/94-G-9	29.9	235.7	1.1		5.7	0.7	0.7	0.7
7	11743	PETRO CANADA PRODUCTS	374 1ST STREET, VANDERHOOF, B.C.								
7	11854	ROBSON VALLEY SHAKE AND SHINGLE LTD.	LOTS 5,6,7, AND 8, LOT 7366, CARIBOO, PLAN 2436	184.6	1.4	0.1		15.6	19.9	10.9	8.0
7	11861	TRC CEDAR LIMITED	SAWMILL AT 275 MCBRIDE ROAD, SOUTH...MCBRI	300.3	2.3	0.2		25.4	46.2	25.4	18.5
7	12092	PRINCE GEORGE AND AREA PET MEMORIAL PAR	D.L. 8380 WEST SIDE OF SHELLEY ROAD	0.1					0.3	0.2	0.2
7	12128	REDEKOPP, GERALD HENRY	DL 2304 PRD	22.5	0.2	0.0		1.9	5.5	5.5	5.5
7	12133	IMPERIAL OIL LIMITED	FORMER TEXACO BULK PLANT-AIRPORT HILL-PG					7.9			
7	12305	SHELL CANADA PRODUCTS LIMITED	WEST OF TUMBLER RIDGE DISTRICT (WESTERN B	57.4	154.8	0.1		11.0	1.4	1.4	1.4
7	12448	CANADIAN HUNTER EXPLORATION LTD.	NOEL GAS PLANT - SW DAWSON CREEK	84.1	658.0	1.2		574.3	0.3	0.3	0.3
7	12449	CANADIAN HUNTER EXPLORATION LTD.	BRASSY PLANT - S.W. DAWSON CREEK, B.C.	4.4	34.5	0.0		38.1	0.0	0.0	0.0
7	12450	CANADIAN HUNTER EXPLORATION LTD.	SUNDOWNER COMPRESSOR STATION -SW DAWS	94.3	664.0	0.1		18.2	2.2	2.2	2.2
7	12517	SUNCOR INC.	ABOUT 26 KM N OF WONOWON, B.C.	12.1	10.8	0.4		2.3	0.3	0.3	0.3
7	12518	SUNCOR INC.	ABOUT 10 KN SOUTHWEST OF WONOWON, B.C.	22.9	28.7	1.4		4.4	0.6	0.6	0.6
7	12559	CZAR RESOURCES LTD.	NORTH MONIAS	61.8	488.2	1.6		11.9	1.4	1.4	1.4
7	12677	SCEPTRE RESOURCES LIMITED	B-77-A/93-I-15, TUMBLER RIDGE	2.3	18.3	0.3		0.5	0.1	0.1	0.1
7	12861	SUNCOR INC.	ABOUT 80 KM NE OF FORT NELSON, B.C.	10.1	66.5	24.6		2.3	1.4	1.4	1.4
7	12862	EXCEL ENERGY INC.	BIRCH FIELD - FORT ST. JOHN AREA	8.7	65.6	6.6		1.7	0.3	0.3	0.3
7	12957	SARACO INDUSTRIES LTD.	VARIOUS LOCATIONS THROUGHOUT BRITISH COL	7.0	21.3	27.9		3.4	5.6	2.3	1.4
7	12980	TEESLEE FOREST PRODUCTS LTD.	SISIL TL'O K'UT INDIAN RES. #14	650.0	5.0	0.5		55.0	100.0	55.0	40.0
7	12985	HOME OIL COMPANY LIMITED	PEGGO GAS FIELD, HELMUT, B.C.	6.9	54.3	0.2		1.3	0.2	0.2	0.2
7	13248	PETRO CANADA	6055 MONTEREY ROAD, PRINCE GEORGE, B.C.					6.9			
7	13373	ASTRO PAVING LTD.	MOBILE ASPHALT PLANT	7.0	32.0	2.2		2.2	2.4	2.2	2.1
7	13392	MIKE WIDELL	HIGHWAY 5 SOUTH AND CEDARSIDE ROAD	54.1	0.4	0.0		4.6	10.0	3.7	2.4
7	13405	P.F.I. PELLETT FLAME INC.	12080 WILLOW CALE FOREST ROAD	3.1	15.7	0.1		0.8	40.7	10.2	0.9
7	13484	SLOCAN FOREST PRODUCTS LTD.	MILE 294, ALASKA HIGHWAY, 5 KM S. OF FORT NE						54.7	31.7	10.4
7	13538	NORTHWOOD PULP AND TIMBER LIMITED	FRASER FLATS, PRINCE GEORGE, B.C.						42.4	17.0	8.5
7	13769	R.D. MOYEN HOLDINGS LTD.	6910 GRAVES ROAD PRINCE GEORGE						0.0		
7	13770	R.D. MOYEN HOLDINGS LTD.	6910 GRAVES ROAD PRINCE GEORGE								
10	1	GVRD Burnaby Incinerator	Lower Fraser Valley	13.7	473.8	115.1		4.1	7.0	2.6	1.7
10	1	University of British Columbia	Lower Fraser Valley	0.2	0.7	0.1		0.1	2.7	1.5	1.3
10	2	Borden Chemical Division	Lower Fraser Valley	1.0	4.0	0.1		4.4	0.5	0.5	0.4
10	3	Richmond Steel Recycling Ltd.	Lower Fraser Valley						16.7		
10	4	Reichhold Limited	Lower Fraser Valley	0.9	4.3	0.1		3.0	1.1	0.2	0.2
10	7	Erco, A Division Of Tenneco Canada Inc.	Lower Fraser Valley	0.1	0.4	0.0		0.0	0.1	0.1	0.1
10	8	Fraser Wharves Ltd	Lower Fraser Valley					0.9			
10	10	Canadian Occidental Petroleum Ltd.	Lower Fraser Valley	20.3	278.6	1.3		0.7	3.4	2.5	2.5
10	14	Canadian Forest Products Limited	Lower Fraser Valley	6.2	25.2	0.4		48.9	225.0	39.1	21.3
10	15	Cantree Plywood Corporation	Lower Fraser Valley	3.3	13.4	0.3		43.3	177.4	16.0	5.3
10	19	Sawarne Lumber Co. Ltd.	Lower Fraser Valley	0.2	0.8	0.0		0.0	27.5	11.1	5.6
10	20	Greater Van. Sewerage & Drainage Dist.	Lower Fraser Valley	3.5	3.8	3.9		2.3	1.7	0.0	
10	24	West Coast Plywood Company Limited	Lower Fraser Valley	3.7	15.0	0.8		4.7	13.8	8.6	3.8
10	30	Macmillan Bloedel Industries Limited	Lower Fraser Valley	0.6	2.3	0.0		0.1	155.7	66.6	31.7
10	32	Richmond Plywood Corporation Limited	Lower Fraser Valley	288.8	36.4	3.5		83.7	218.3	102.1	52.1
10	34	Scott Paper Limited	Lower Fraser Valley	243.3	72.1	2.2		6.2	158.0	37.6	32.5
10	35	Bc Forest Products Ltd, Van. Sawmill Div	Lower Fraser Valley					19.0	27.1	6.7	3.3
10	36	Crown Forest Industries Limited	Lower Fraser Valley	1.4	5.6	2.1		3.3	51.1	0.5	0.5

Point Source Emissions by Source (page 19 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
10	39	Macmillan Bloedel Ltd, Particleboard Div	Lower Fraser Valley	39.7	8.0	0.5		156.5	202.8	73.3	27.2
10	40	International Forest Products	Lower Fraser Valley	0.9	3.4	0.1		38.4	20.6	8.5	4.4
10	47	Macmillan Bloedel Ltd, White Pine Div	Lower Fraser Valley						76.0	30.4	15.2
10	48	International Forest Products	Lower Fraser Valley	0.5	2.2	0.0		6.5	217.7	70.1	34.9
10	51	British Columbia Forest Products Ltd.	Lower Fraser Valley	1.3	5.3	0.1		19.0	92.8	44.3	14.6
10	52	Esco Limited	Lower Fraser Valley	1.1	11.4	2.5		23.4	87.8	33.4	27.0
10	56	Haida Forest Products Ltd	Lower Fraser Valley	0.1	0.4	0.0		0.0	8.9	3.6	1.8
10	58	Columbia Bitulithic Limited	Lower Fraser Valley	0.5	2.3	1.5		0.1	7.9	3.3	2.7
10	59	Canadian Forest Products Ltd.	Lower Fraser Valley	4.3	0.2	0.1		12.2	18.1	8.5	5.0
10	60	Weldwood Of Canada Limited	Lower Fraser Valley	360.6	62.5	4.1		5.9	83.1	43.1	23.8
10	63	Stella-Jones Inc.	Lower Fraser Valley	0.7	2.8	0.1		0.1	0.0	0.0	0.0
10	64	Domtar Inc. Corrugated Container Div.	Lower Fraser Valley	0.7	2.9	0.1		1.3	123.6	0.3	0.3
10	65	Macmillan Bathurst Inc.	Lower Fraser Valley	0.6	2.6	0.1		0.1	32.2		
10	68	Imperial Lumber Limited	Lower Fraser Valley	1.0	3.8	0.1		0.1	14.5	6.0	3.2
10	69	Domtar Inc. - Construction Materials Div	Lower Fraser Valley	6.5	26.0	0.5		0.5	23.9	14.9	5.9
10	71	Sauder Industries Limited - Door Div.	Lower Fraser Valley	0.2	0.7	0.0		74.2	11.3	3.2	1.6
10	78	Winvan Paving Ltd.	Lower Fraser Valley	1.2	16.0	0.1		0.1	11.0	5.1	1.2
10	81	Neptune Bulk Terminals (Canada) Ltd.	Lower Fraser Valley						422.5	142.4	42.2
10	82	Westroc Industries Limited	Lower Fraser Valley	7.1	28.2	0.5		0.6	28.9	16.6	6.9
10	83	Howe Sound Pulp & Paper	Lower Fraser Valley					4.7	35.4	12.5	6.3
10	86	Vancouver Wharves Ltd.	Lower Fraser Valley						167.2		
10	95	Rempel Brothers Concrete Ltd.	Lower Fraser Valley	0.0	0.2			0.0	7.6	3.9	1.2
10	96	Pan-Abode International Ltd.	Lower Fraser Valley	0.4	1.9	0.1		0.1	7.6	3.2	1.7
10	97	Columbia Bitulithic Limited	Lower Fraser Valley	0.9	3.4	20.3		0.1	12.3	4.4	3.5
10	101	Ocean Construction Supplies Limited	Lower Fraser Valley	0.0	0.1			0.0	8.6	4.2	1.3
10	102	Terminal Sawmills Ltd	Lower Fraser Valley					2.4	29.8	10.6	5.3
10	103	Reliance Foundry Company Limited	Lower Fraser Valley	0.0	0.2	0.1		1.1	9.7	5.9	4.7
10	106	Canada Cement, Lafarge Concrete Div.	Lower Fraser Valley						9.6	4.6	0.9
10	107	Robar Industries Ltd.	Lower Fraser Valley	0.1	0.3			2.3	10.3	4.0	3.0
10	111	Ocean Construction Supplies Limited	Lower Fraser Valley	0.4	1.8	0.1		0.1	8.0	1.4	0.4
10	113	General Chemical Canada Ltd.	Lower Fraser Valley								
10	114	Allied Ready Mix Ltd	Lower Fraser Valley						5.6	2.9	0.8
10	115	Labatt Brewing Company Limited	Lower Fraser Valley	2.8	11.3	0.3		19.7	17.6	8.0	3.1
10	116	Modern Woodcraft Manufacturing Ltd	Lower Fraser Valley						0.4	0.1	0.1
10	117	Chevron Canada Limited	Lower Fraser Valley	84.7	387.3	1638.7		461.0	160.5	116.0	71.5
10	121	Delta Cedar Products Ltd.	Lower Fraser Valley	131.0	14.8	1.5		2.1	81.9	45.1	27.5
10	123	Bclp Coast Sawmills Limited	Lower Fraser Valley	0.8	3.1	0.1		0.1	9.6	3.5	1.9
10	126	City Of Vancouver	Lower Fraser Valley	0.5	2.2	0.1		0.1	11.0	1.6	0.2
10	129	Western Newsprint Limited	Lower Fraser Valley						4.0		
10	130	Kennametal Inc.	Lower Fraser Valley	0.1	1.1	0.0		34.4	14.9	7.6	6.0
10	132	Somerville Belkin Industries Limited	Lower Fraser Valley						42.9		
10	133	R P Richmond Industrial Contractors Ltd.	Lower Fraser Valley	0.0	0.1			88.7	8.9	4.7	3.2
10	137	Nabob Foods Limited	Lower Fraser Valley	0.8	3.7	0.1		0.7	20.6	0.5	0.5
10	141	West Coast Reduction Ltd.	Lower Fraser Valley	5.7	23.0	0.4		0.5	53.7	2.3	2.3
10	142	Metalex Products Ltd.	Lower Fraser Valley	0.2	0.9	27.4		0.1	2.6	2.4	2.1
10	144	Kask Bros. Ready Mix Ltd.	Lower Fraser Valley	0.1	0.6	0.0		0.0	6.1	3.0	0.9
10	145	Associated Foundry Limited	Lower Fraser Valley	339.3	1.9	3.2		2.0	15.9	7.1	6.6
10	149	Crown Flexpak Ltd.	Lower Fraser Valley	0.1	0.6	0.0		253.3	0.5	0.1	0.1
10	153	Westshore Terminals Ltd.,	Lower Fraser Valley						1583.0	807.3	237.5
10	154	Canada Cement Lafarge Ltd.	Lower Fraser Valley	29.3	2422.0	449.7		6.8	437.1	288.7	122.0
10	155	British Columbia Packers Limited	Lower Fraser Valley	1.0	4.6	0.1		0.2	2.9	0.9	0.9
10	157	Target Concrete Products Ltd.	Lower Fraser Valley						2.9	1.6	0.8

Point Source Emissions by Source (page 20 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
10	161	Thompson Foundry Ltd.	Lower Fraser Valley	0.0	0.2	0.0		0.3	3.4	1.9	1.3
10	163	B. C. Fancy Sausage Co. Ltd.	Lower Fraser Valley	0.2	1.5	0.0		0.4	4.0	3.6	3.0
10	165	Shaw Pipe Protection Limited	Lower Fraser Valley	0.4	1.5	0.1		10.6	0.5	0.4	0.4
10	167	Jack Cewe Limited	Lower Fraser Valley	1.0	3.8	0.1		0.1	17.4	4.0	2.2
10	171	Cae Machinery Ltd	Lower Fraser Valley	0.2	0.6	0.0		3.2	9.6	9.0	9.0
10	174	Cloverdale Paint And Chemicals Ltd.	Lower Fraser Valley					54.8	8.5	1.7	0.6
10	175	Tilbury Cement Limited	Lower Fraser Valley	116.0	2677.0	202.0		15.0	267.1	162.1	73.4
10	176	Molson Brewery B. C. Limited	Lower Fraser Valley	3.3	13.1	0.2		0.3	12.3	1.5	1.3
10	178	Van Waters & Rogers Ltd.	Lower Fraser Valley					2.4			
10	183	Alex Gair & Sons Ltd.	Lower Fraser Valley	6.9	0.8	0.4		0.1	0.9	0.8	0.7
10	184	Tree Island Steel Co. Ltd.	Lower Fraser Valley	2.1	109.8	0.3		68.4	20.5	4.6	4.6
10	188	Mckenzie Barge & Marine Ways Ltd.	Lower Fraser Valley					9.7	0.2	0.1	0.1
10	190	Island Paper Mills Limited	Lower Fraser Valley	19.0	75.9	1.3		1.5	57.0	7.4	7.4
10	192	Airich Custom Cabinets Ltd	Lower Fraser Valley					3.2			
10	197	Highland Foundry Ltd.	Lower Fraser Valley	0.2	1.1	0.0		7.1	21.4	18.1	10.8
10	200	Petro-Canada Products Inc.	Lower Fraser Valley	4.9	6.8	0.4		0.4	1.9	1.9	1.9
10	204	Dickson's Food Services Ltd.	Lower Fraser Valley	0.0	0.6	0.0			9.7	0.0	0.0
10	205	Pacific Coast Terminals Co. Ltd.	Lower Fraser Valley		0.2			1.4	106.4		
10	206	Terminal City Iron Works Ltd.	Lower Fraser Valley	0.1	0.4	0.0		11.6	50.2	37.1	29.8
10	207	Saskatchewan Wheat Pool	Lower Fraser Valley	0.1	0.4			0.0	196.0	48.1	18.1
10	212	Titan Steel & Wire Co. Ltd.	Lower Fraser Valley	1.1	4.7	0.1		1.7	0.5	0.5	0.5
10	216	Weiser Inc.	Lower Fraser Valley	0.2	1.2	0.0		15.3	20.2	0.1	0.1
10	217	The Alberta Wheat Pool	Lower Fraser Valley	0.1	0.4	0.0		0.0	340.3	84.4	22.3
10	218	Fairey And Company Ltd.	Lower Fraser Valley	0.1	0.9	0.0		0.2	1.0	0.7	0.6
10	219	Prism Systems Inc	Lower Fraser Valley					2.4	0.1		
10	223	Pacific Elevators Limited	Lower Fraser Valley	5.8	28.3	0.7		1.5	225.6	52.5	20.7
10	225	Rypac Aluminum Recycling Ltd.	Lower Fraser Valley		0.5				3.4	3.4	3.3
10	229	Can-Am Steel Drums Limited.	Lower Fraser Valley	0.1	0.5			12.4	0.1	0.1	0.1
10	232	W. R. Grace And Company Of Canada Ltd.	Lower Fraser Valley	0.1	0.2	0.0		0.0	2.8		
10	235	Modern Hardchrome (1986) Ltd.	Lower Fraser Valley								
10	236	Davis Wire Industries Ltd.	Lower Fraser Valley	0.5	2.4	0.1		0.3	1.5	0.3	0.3
10	237	A-Z Sponge & Foam Products Ltd.	Lower Fraser Valley					24.6			
10	239	Century Pacific Foundry Ltd.	Lower Fraser Valley		0.0			0.4	11.0	7.2	4.1
10	240	Fleetwood Sausage Ltd.	Lower Fraser Valley	0.3	1.4	0.0		0.5	0.8	0.8	0.7
10	241	Pioneer Grain Terminal Limited	Lower Fraser Valley	0.0	0.0				120.5	30.0	11.4
10	242	B.A. Blacktop Limited	Lower Fraser Valley	0.6	2.3	0.4		0.1	0.7	0.2	0.0
10	247	Rempel Brothers Concrete Limited	Lower Fraser Valley	0.0	0.1				5.4	2.7	0.8
10	248	Fibreco Export Inc.	Lower Fraser Valley						452.5	262.4	86.0
10	250	Ocean Construction Supplies Limited	Lower Fraser Valley	0.0	0.1				2.7	1.4	0.4
10	252	Flecto Coatings Ltd.	Lower Fraser Valley					41.4	1.4	0.4	0.2
10	253	Bel-Par Industries Ltd.	Lower Fraser Valley	0.1	0.4	0.0		8.0	3.9	1.9	0.3
10	254	Mohawk Lubricants, Div Of Mohawk Oil Ltd	Lower Fraser Valley	1.5	6.5	10.5		0.3	2.4	1.4	0.7
10	255	R. Wales & Son, Ltd.	Lower Fraser Valley	0.1	0.3	4.4		7.2	28.4	16.8	12.3
10	257	Residential Ready Mix Ltd.	Lower Fraser Valley	0.0	0.1				4.4	2.1	0.6
10	260	Stork Craft Ltd.	Lower Fraser Valley					154.3	26.8	10.7	5.5
10	261	Shell Canada Ltd.	Lower Fraser Valley	6.1	28.3	0.4		0.5	2.4	2.4	2.4
10	262	Shell Canada Products Limited	Lower Fraser Valley								
10	263	Primex Forest Products Ltd.	Lower Fraser Valley	13.5	3.3	0.2		0.3	66.8	27.6	14.4
10	266	Chevron Canada Limited	Lower Fraser Valley								
10	267	Diachem Industries Limited	Lower Fraser Valley					0.0			
10	269	Teal Cedar Products Ltd.	Lower Fraser Valley	0.8	3.0	0.1		14.3	119.5	59.5	21.8
10	270	Ocean Construction Supplies Limited	Lower Fraser Valley	0.0	0.2			0.0	2.8	1.4	0.4

Point Source Emissions by Source (page 21 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
10	271	Roofmart Pacific Ltd.	Lower Fraser Valley	0.0	0.0						
10	273	B.C. Clean Wood Preservers Ltd	Lower Fraser Valley	0.1	0.6	0.0		0.0	0.1	0.1	0.1
10	274	Harcros Chemicals Canada Ltd	Lower Fraser Valley					0.0			
10	277	Laidlaw Environmental Services	Lower Fraser Valley					9.2	0.8		
10	278	Macmillan Bloedel Limited, Parallam Div.	Lower Fraser Valley	9.6	10.4	0.3		13.8	91.3	34.7	14.0
10	285	Stanchem,A Business Unit Of C-I-L Inc.	Lower Fraser Valley		0.2			2.6			
10	286	United Grain Growers Ltd.	Lower Fraser Valley						72.3	15.6	5.8
10	288	Lafarge Concrete, A Division Of Ccl Ltd.	Lower Fraser Valley						6.8	3.4	1.0
10	290	Holnam West Materials Ltd.	Lower Fraser Valley						0.6	0.2	0.0
10	293	Torrefazione Coloiera And Importing Ltd.	Lower Fraser Valley		0.0				0.1		
10	294	Esso Petroleum Canada	Lower Fraser Valley	50.0	174.4	593.5		349.5	69.9	49.2	29.5
10	295	Model Uniforms	Lower Fraser Valley	0.1	0.3	0.0		3.6	3.9	0.0	0.0
10	296	Ocean Construction Supplies Ltd.	Lower Fraser Valley	0.0	0.2	0.0		0.0	10.4	5.1	1.7
10	305	Warnock Hersey Professional Services	Lower Fraser Valley								
10	307	P. C. L. Packaging Limited	Lower Fraser Valley	0.0	0.2			161.2	5.1	0.0	0.0
10	309	Dynacor Coatings Ltd	Lower Fraser Valley					14.9			
10	311	International Marble & Stone Company Ltd	Lower Fraser Valley	0.1	0.3	0.0		0.0	8.7	3.3	1.1
10	312	J. Kobelt Manufacturing Company Limited	Lower Fraser Valley		0.0				0.0		
10	315	Mcfarland Cascade Pole Ltd.	Lower Fraser Valley						1.6	0.9	0.3
10	321	Rempel Bros. Concrete Ltd.	Lower Fraser Valley	0.0	0.0				5.5	2.8	0.8
10	322	Ebco Industries Ltd.	Lower Fraser Valley	0.6	7.6	0.0		2.7	12.4	0.3	0.3
10	326	Woodbridge Foam Corporation, Western Div	Lower Fraser Valley	0.0	0.2	0.0		0.1	0.0	0.0	0.0
10	330	British Columbia Hydro & Power Authority	Lower Fraser Valley	431.4	1393.4	45.2		26.3	90.6	90.6	90.6
10	331	Granville Island Brewing Company Ltd	Lower Fraser Valley	0.0	0.1			0.0	0.0	0.0	0.0
10	333	Canadian Autoparts Toyota Inc.	Lower Fraser Valley	0.7	3.5	0.6		85.6	4.5	2.3	1.4
10	335	Lafarge Concrete,Div Of Can Cem Lafarge	Lower Fraser Valley	0.3	1.3	0.0		0.0	3.0	1.4	0.5
10	336	Con-Force Structures Ltd	Lower Fraser Valley	0.4	1.5	0.0		0.0	4.6	0.6	0.3
10	340	Hal Industries Ltd.	Lower Fraser Valley	0.1	0.8	0.0		0.0	0.8	0.8	0.7
10	341	Accurate Rubber Products Ltd.	Lower Fraser Valley	0.0	0.1	14.8		3.9	7.2		
10	345	Quebecor Printing Inc.	Lower Fraser Valley	0.0	1.3	0.0		11.8	5.3	0.0	0.0
10	346	Canada Colors And Chemicals Limited	Lower Fraser Valley					2.8	0.2	0.2	0.1
10	347	Glenayre Electronics Ltd.	Lower Fraser Valley					0.2	3.8		
10	349	Houweling Nurseries Ltd.	Lower Fraser Valley	153.6	28.0	1.9		2.7	34.8	28.3	23.0
10	350	Freybe Sausage Ltd.	Lower Fraser Valley	0.2	1.2	0.0		0.7	3.8	3.4	2.9
10	355	Ocl Manufacturing Ltd.	Lower Fraser Valley	0.0	0.1			0.0	2.7		
10	357	Later Chemicals Ltd.	Lower Fraser Valley						3.3		
10	363	British Columbia Hydro & Power Authority	Lower Fraser Valley								
10	365	Ball Packaging Products	Lower Fraser Valley	0.7	3.4	0.0		81.3	28.4	0.4	0.4
10	367	Chamberlain Spring Ltd.	Lower Fraser Valley	0.2	1.1			2.2	6.6	0.1	0.1
10	370	Moore-Clarke Co.,(Canada) Inc.	Lower Fraser Valley	0.6	2.6	0.1		0.1	14.5	0.3	0.3
10	371	Englehard Industries Of Canada	Lower Fraser Valley		0.0						
10	373	Tilbury Laminates Ltd.	Lower Fraser Valley						2.9	1.2	0.6
10	374	Canada Metal Company Ltd.	Lower Fraser Valley	0.1	0.3	0.0		0.0	0.9	0.5	0.5
10	375	Astrographic Industries Ltd.	Lower Fraser Valley	0.0	0.1			13.5			
10	378	Taiga Forest Products Ltd.	Lower Fraser Valley								
10	379	Petro-Canada Inc.	Lower Fraser Valley								
10	380	Columbia Containers Ltd.	Lower Fraser Valley						2.1	0.6	0.1
10	383	Ticor Technology Ltd.	Lower Fraser Valley	0.1	9.7	4.6		0.1	1.0	0.4	0.2
10	385	Mitchell Press Ltd.	Lower Fraser Valley		1.9	0.0		6.7	5.1		
10	386	North Star Mills Ltd.	Lower Fraser Valley					0.7	1.5	0.6	0.3
10	389	Canterbury Coffee Corporation	Lower Fraser Valley		0.2				3.3	0.5	
10	392	Inter-For - Mackenzie Mills Division	Lower Fraser Valley					4.9	26.1	10.3	5.1

Point Source Emissions by Source (page 22 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
10	394	Hudson, Mitchel & Sons Lumber Inc.	Lower Fraser Valley						17.1	6.9	3.4
10	399	Ewos Canada Limited	Lower Fraser Valley	1.1	4.2	0.1		0.1	13.6	2.3	2.2
10	401	Vancouver Fancy Meats	Lower Fraser Valley	0.1	0.7	0.0		0.3	2.1	1.9	1.6
10	402	Valley-Rite Mix	Lower Fraser Valley	0.0	0.1			0.0	8.8	4.0	1.2
10	403	Nesmont Precious Metals Corp.	Lower Fraser Valley	0.0	1.1				2.1		
10	404	Trident Millwork And Display Industries	Lower Fraser Valley					1.6			
10	406	Laguna Woodcraft	Lower Fraser Valley					30.9	2.0	0.8	0.4
10	409	Mills Paint Sales Ltd	Lower Fraser Valley					5.3	0.7	0.6	0.2
10	413	Bacon, Donaldson And Assoc.	Lower Fraser Valley					0.4			
10	414	Agrico Sales Ltd	Lower Fraser Valley						0.8		
10	418	Doman-Silviculture Division	Lower Fraser Valley						39.9	14.9	6.0
10	419	Sauder Industries Ltd.-Vinylcraft	Lower Fraser Valley					21.8	15.9	2.9	2.2
10	420	Wagner And Teldon Publishing Company	Lower Fraser Valley		0.4	0.0		9.6	2.1	2.1	2.1
10	422	Merlin Hygenic Products Ltd.	Lower Fraser Valley	2.6	10.6	0.2		0.2	42.7	1.1	1.1
10	423	CTF Systems Inc.	Lower Fraser Valley					0.1	0.4		
10	424	Primex Forest Products Ltd.	Lower Fraser Valley					24.8	47.1	18.8	9.4
10	425	Vancouver Shipyards Co. Ltd.	Lower Fraser Valley					65.0			
10	426	Canadian Airlines International Ltd.	Lower Fraser Valley	4.2	28.1	16.8		33.5	76.2	19.2	12.0
10	428	BFI Medical Waste Systems	Lower Fraser Valley	0.0	0.2			0.0	0.0	0.0	0.0
10	432	B.P. Resources Canada-Texada Lime Div'n	Lower Fraser Valley	8.1	32.3	0.6		0.6	61.7	18.9	7.7
10	435	Otter Farm & Co-Operative	Lower Fraser Valley	0.1	0.4	0.0		0.0	10.9	3.0	0.3
10	437	Coast Masonry Supplies	Lower Fraser Valley	0.1	0.4	0.0		0.0	0.7	0.4	0.1
10	439	Smit Enterprises	Lower Fraser Valley	0.1	0.3			0.0	10.1	0.6	0.1
10	440	CKF Incorporated	Lower Fraser Valley					28.2	8.3		
10	441	Westcon Construction Products	Lower Fraser Valley						0.0		
10	443	Koch Materials Company	Lower Fraser Valley	0.1	0.6	0.0		0.0	0.7	0.7	0.7
10	444	Serpentine Cedar Ltd.	Lower Fraser Valley	14.6	0.8	0.2		0.4	16.4	14.5	12.2
10	445	Ipex Inc.	Lower Fraser Valley						3.0		
10	447	Premier Millwork Inc.	Lower Fraser Valley					2.3	2.3		
10	450	Valley Rite Mix Ltd	Lower Fraser Valley	0.0	0.0				5.6	2.9	0.9
10	451	Pacific Coast Energy Corp.	Lower Fraser Valley	42.9	35.6	0.6		0.5	3.5	3.5	3.5
10	452	Rempel Brothers Concrete	Lower Fraser Valley	0.0	0.0				5.3	2.7	0.8
10	454	Britco Export Packers Ltd.	Lower Fraser Valley	0.1	0.4	0.0		0.0	0.1	0.1	0.1
10	457	Newstech Recycling Lts.	Lower Fraser Valley	2.8	11.0	0.5		0.2	19.8	1.1	1.1
10	458	Twinpak Inc.	Lower Fraser Valley	0.1	0.3			17.7	0.3	0.0	0.0
10	460	Precision Heat Treat Ltd	Lower Fraser Valley	0.1	0.4			0.0	0.0	0.0	0.0
10	465	Western Quality Wood Products Ltd.	Lower Fraser Valley					0.6	7.8	3.1	1.6
10	466	Tyee Timber Products Ltd.	Lower Fraser Valley						7.9	3.2	1.6
10	467	Interior - Mcdonald Cedar Division	Lower Fraser Valley	0.2	0.7	0.0		0.0	49.1	11.3	5.7
10	468	City of Surrey	Lower Fraser Valley		0.0	0.2			0.0		
10	470	Fletchers Fine Foods Ltd.	Lower Fraser Valley	3.3	1.8	0.0		13.5	13.6	12.3	10.4
10	471	Kholer's European Sausage Ltd.	Lower Fraser Valley								
10	472	Beaver Electric Machinery Ltd.	Lower Fraser Valley		0.1			2.2	0.1		
10	473	Wedgewood Industries Inc.	Lower Fraser Valley					4.1	0.4	0.2	0.1
10	474	Benjamin Moore & Co. Ltd.	Lower Fraser Valley					11.7	2.2	1.9	0.7
10	475	Akzo Nobel Coatings Ltd.	Lower Fraser Valley					7.8			
10	476	Macmillan Bloedel Ltd	Lower Fraser Valley	0.1	0.5	0.0		0.2	12.2	0.2	0.1
10	477	General Electric Canada Inc.	Lower Fraser Valley	0.0	0.2	0.0		4.5	4.5		
10	478	Canadian Aircraft Product	Lower Fraser Valley	0.1	0.5	0.0		23.0	19.7	9.3	5.9
10	481	Forintek Canada Corp.	Lower Fraser Valley	0.1	0.2			0.1	2.5	0.0	0.0
10	482	Web Press Graphics Ltd.	Lower Fraser Valley	0.0	1.9	0.0		14.9	0.7		
10	483	Wismer & Rawlings Electric Ltd.	Lower Fraser Valley	0.0	0.1	0.1		4.6	0.1	0.0	0.0

Point Source Emissions by Source (page 23 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
10	484	City of Surrey	Lower Fraser Valley		0.6	0.0			0.0	0.0	0.0
10	485	Montalco Cabinets	Lower Fraser Valley					3.2	1.6		
10	486	Spruceland Millworks Bc Ltd	Lower Fraser Valley						5.7	2.3	1.1
10	488	Rempel Brothers Concrete Ltd.	Lower Fraser Valley	0.0	0.1				5.7	2.9	0.8
10	489	Coastal Containers Ltd.	Lower Fraser Valley						3.5	0.0	
10	496	Pacific Fermentation Industries	Lower Fraser Valley								
10	500	HS Tool And Parts Inc.	Lower Fraser Valley					0.7	1.5		
10	505	Unifirst Canada	Lower Fraser Valley	0.1	0.7	0.0		0.0	4.0	0.5	0.5
10	508	Nikolai Manufacturing Inc.	Lower Fraser Valley					0.4	2.9	1.2	0.6
10	512	Philip Environmental Services	Lower Fraser Valley		1.6	0.8		3.7	2.3		
10	514	Basic Foods Inc.	Lower Fraser Valley						7.2	3.1	1.9
10	515	Surrey Millwork (1990) Ltd.	Lower Fraser Valley						12.4	5.0	2.5
10	518	Indalex - Division of Indal	Lower Fraser Valley	0.2	0.9			52.6	0.1	0.1	0.1
10	519	General Paint	Lower Fraser Valley					80.7	1.8	1.5	0.5
10	520	Ocean Construction Supplies	Lower Fraser Valley	0.0	0.0				3.2	1.5	0.4
10	521	Canron Inc. Western Structural Division	Lower Fraser Valley					6.6			
10	528	Ropale Equipment Refinishers Ltd.	Lower Fraser Valley					1.6	1.6		
10	529	Marine Plastics Ltd.	Lower Fraser Valley	0.0	0.1			41.9	25.7	14.8	10.5
10	531	Primex Fibre Ltd.	Lower Fraser Valley						0.1		
10	533	Canfor Special Division	Lower Fraser Valley	0.0	0.1				14.8	5.9	3.0
10	536	TPL Phytogen	Lower Fraser Valley	0.0	0.2			1.4	0.1	0.0	0.0
10	541	Imperial Oil Limited	Lower Fraser Valley					2.3			
10	543	National Silicates Ltd.	Lower Fraser Valley	0.1	0.4	0.6		0.0	0.1	0.0	0.0
10	544	Valley Rite-Mix Ltd.	Lower Fraser Valley		0.0				3.3	1.6	0.5
10	548	C.P.L.Paperboard Industries	Lower Fraser Valley	1.3	16.0	0.8		0.6	0.9	0.2	0.2
10	549	Mcallister Spring Ltd.	Lower Fraser Valley	0.1	0.5			0.0	11.3	0.5	0.5
10	550	Imprimerie Transcontinale Inc.	Lower Fraser Valley		1.0	0.0		13.2	6.2	6.2	6.1
10	551	Boxmaster Packaging Ltd.	Lower Fraser Valley	0.1	0.4	0.0		0.0	54.6	0.1	0.1
10	554	Callaway Chemical Limited.	Lower Fraser Valley	0.1	0.2	0.0		0.0	0.0	0.0	0.0
10	558	Pacific Mako	Lower Fraser Valley	0.1	0.3			1.6	13.5	9.1	6.3
10	559	Peter Kiewit Son's Ltd.	Lower Fraser Valley						5.0	2.4	0.7
10	563	Imperial Oil Limited	Lower Fraser Valley					2.6			
10	567	San Lumber Co. Ltd.	Lower Fraser Valley	0.1	0.5	0.0		0.0	17.6	7.1	3.6
10	571	Rogers Sugar Ltd.	Lower Fraser Valley	8.7	117.2	0.6		4.7	32.4	1.2	1.2
10	572	B.C.Roofing Products	Lower Fraser Valley		0.1			0.2	0.1		
10	578	Metaloy of B.C. Ltd.	Lower Fraser Valley	0.0	0.0			0.5			
10	579	Western Drum Recyclers	Lower Fraser Valley	0.5	2.2	0.4		4.3	3.1	0.9	0.3
10	580	International Forest Products	Lower Fraser Valley						42.0	16.8	8.4
10	581	North West Rubber Mats Ltd.	Lower Fraser Valley	0.3	1.2	0.0		0.1	40.1	0.2	0.2
10	582	B.W. Creative Wood Industries	Lower Fraser Valley						5.5	2.2	1.1
10	583	Moli Energy	Lower Fraser Valley	1.3	5.3	0.1		20.8	1.8	0.5	0.5
10	584	Associated Cedar Products	Lower Fraser Valley						10.0	4.0	2.0
10	585	Premium Cedar	Lower Fraser Valley						2.5	1.0	0.5
10	586	Imperial Paving Ltd.	Lower Fraser Valley	0.8	2.0	3.1		0.4	57.8	18.5	6.4
10	587	CG Freight Company Ltd.	Lower Fraser Valley						2.1	0.8	0.4
10	588	Cooper & Queenship Yacht Works	Lower Fraser Valley						4.2		
10	589	International Forest Products-Hammond	Lower Fraser Valley	100.0	11.0	1.1		1.6	54.7	18.8	10.7
10	590	International Forest Products	Lower Fraser Valley						2.6	0.8	0.4
10	591	D.G. Logging Ltd.	Lower Fraser Valley	74.9	0.6	0.1		6.3	8.1	4.4	3.2
10	592	Pac-Deck Wood	Lower Fraser Valley	0.1	0.5	0.0		0.0	3.0	1.2	0.6
10	593	Haney Cedar Products	Lower Fraser Valley						3.2	1.3	0.7
10	594	H&R Redi-Mix Ltd.	Lower Fraser Valley	0.0	0.1				3.2	1.6	0.5

Point Source Emissions by Source (page 24 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
10	595	Elk Wood Specialties	Lower Fraser Valley	0.1	0.5	0.0		0.0	25.4	10.2	5.1
10	596	Waldun Forest Products	Lower Fraser Valley						4.7	1.9	0.9
10	597	NPK-OHTA Lumber	Lower Fraser Valley						0.6	0.2	0.1
10	598	Pacific Coast Cedar	Lower Fraser Valley						1.3	0.5	0.3
10	600	C.C.I. Industries Ltd.	Lower Fraser Valley								
10	1938	Slave Lake Cedar Mills Inc.	Lower Fraser Valley	0.2	1.2	0.0		1.5	3.9	1.7	0.9
10	1941	Meeker Cedar Products 1967 Ltd.	Lower Fraser Valley						12.4	5.0	2.5
10	2329	Clayburn Industries Limited	Lower Fraser Valley	2.9	14.6	0.1		0.8	25.3	25.3	25.3
10	2336	Abbotsford Gravel Sales Ltd.	Lower Fraser Valley						0.1	0.0	0.0
10	2676	Imperial Paving Limited	Lower Fraser Valley	9.5	23.1	33.5		8.8	9.1	3.7	3.0
10	2845	Clayburn Industries Limited	Lower Fraser Valley	1.8	8.4	0.2		0.4	184.3	111.5	28.2
10	3530	Empress Foods Division Of Lucerne Foods Ltd.	Lower Fraser Valley	0.0	0.1			0.0	0.0	0.0	0.0
10	3533	Westcoast Energy Inc.	Lower Fraser Valley	16.4	48.5	0.1		1.1	1.1	1.1	1.1
10	3534	Westcoast Energy Inc.	Lower Fraser Valley	6.7	47.6	0.0		3.3	0.2	0.2	0.2
10	3748	Columbia Bitulithic Limited	Lower Fraser Valley	5.7	5.7	48.8		4.1	28.1	4.0	0.3
10	3860	Buckerfield's Limited	Lower Fraser Valley	1.4	6.8			0.4	64.2	19.5	2.2
10	3862	Richie Smith Feeds Inc.	Lower Fraser Valley	0.2	1.1	0.0		0.1	11.7	2.7	0.4
10	4096	Pacific Pallet Ltd.	Lower Fraser Valley						68.3	27.3	13.7
10	4126	International Forest Products Limited	Lower Fraser Valley						65.2	26.1	13.0
10	4195	Abbotsford Grain And Milling Co.	Lower Fraser Valley	0.0	0.1				15.5	6.2	3.1
10	4196	Wall And Redekop Feeds Ltd.	Lower Fraser Valley	0.3	0.8	0.0		0.1	2.4	1.0	0.6
10	4288	M.S.A. Terminals Ltd.	Lower Fraser Valley	0.3	1.4	0.0		0.0	69.2	10.8	0.9
10	4372	General Cedar Products Limited	Lower Fraser Valley	88.7	0.7	0.1		7.5	9.6	5.3	3.8
10	4384	Re-Con Building Products Inc.	Lower Fraser Valley	0.3	0.8	0.0		0.1	8.3	4.6	2.8
10	4431	East Chilliwack Agricultural Co-Op	Lower Fraser Valley	0.6	2.5	0.1		0.1	85.1	17.4	2.7
10	4590	Valley Rite Mix Ltd.	Lower Fraser Valley						0.1	0.1	0.0
10	5143	Flex-Lox Pipe Limited	Lower Fraser Valley					1.2	9.9	0.7	0.5
10	5293	Rempel Bros. Concrete Ltd.	Lower Fraser Valley						0.3	0.2	0.1
10	5306	Rempel Bros. Concrete Ltd.	Lower Fraser Valley						0.0	0.0	0.0
10	5382	Mission Shakes Ltd.	Lower Fraser Valley								
10	5402	Valley Rite Mix Ltd.	Lower Fraser Valley						0.1	0.1	0.0
10	5461	Tristar Brick And Block Ltd.	Lower Fraser Valley						0.1	0.0	0.0
10	5659	Minister Of Agriculture	Lower Fraser Valley								
10	6349	Council Of Forest Industries Of B.C.	Lower Fraser Valley	1568.0	44.8			201.6	179.2	179.2	179.2
10	6411	District Of Chilliwack	Lower Fraser Valley		0.0				0.6	0.5	0.4
10	6512	Great West Cedar Products	Lower Fraser Valley						0.7	0.3	0.1
10	6601	Oakdale Industries Ltd.	Lower Fraser Valley						7.6	3.1	1.5
10	6639	International Forest Products Limited	Lower Fraser Valley	21.0	0.6			2.7	2.4	2.4	2.4
10	6733	Columbia Bitulithic Limited	Lower Fraser Valley	1.1	2.7	3.9		0.7	4.1	3.2	2.7
10	6811	Emil Anderson Construction Co. Ltd.	Lower Fraser Valley					0.4	7.1	3.3	2.1
10	6813	Ivis Wood Industries Ltd.	Lower Fraser Valley						5.0	2.0	1.0
10	6817	Sumas Clay Products Limited	Lower Fraser Valley	0.2	1.0	0.0		0.1	18.2	1.3	0.2
10	6830	Iloman Canada Inc.	Lower Fraser Valley	0.1	0.5	0.0		0.0	0.1	0.1	0.1
10	7018	Mount Baker Forest Products Ltd.	Lower Fraser Valley						5.6	2.2	1.1
10	7230	Hope Ready-Mix Ltd.	Lower Fraser Valley						0.1	0.0	0.0
10	7233	Jaguar Shake Co. Ltd.	Lower Fraser Valley	5.9	0.1			0.5	1.8	0.8	0.5
10	7235	Prospective Shake Products Ltd.	Lower Fraser Valley						7.5	3.0	1.5
10	7502	Fraser Valley Duck And Goose Ltd.	Lower Fraser Valley		0.0				0.1	0.0	0.0
10	7768	Northside Cedar Products Limited	Lower Fraser Valley						14.5	5.8	2.9
10	7965	Imperial Paving Limited	Lower Fraser Valley	3.8	4.4	6.3		2.6	42.7	6.0	0.4
10	7967	Pillsbury Canada Limited	Lower Fraser Valley	0.2	0.9	0.0		0.1	0.1	0.1	0.1
10	8109	Premdor Inc.	Lower Fraser Valley					9.2	5.2	2.1	1.1

Point Source Emissions by Source (page 25 of 25)

Reg.	Permit	Company	Location	Tonnes of Emissions							
				CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
10	8172	Lyle Forest Products Ltd.	Lower Fraser Valley						31.9	12.8	6.4
10	8173	Inland Shake And Shingle Ltd.	Lower Fraser Valley						5.5	2.2	1.1
10	8174	Uneeda Wood Products Ltd.	Lower Fraser Valley	22.5	1.5	0.3		2.7	32.0	18.7	13.0
10	8264	Ainsworth Lumber Co. Ltd.	Lower Fraser Valley						47.0	18.8	9.4
10	8265	Act One Uniform Rentals, Inc.	Lower Fraser Valley	0.5	2.4	0.1		0.1	0.3	0.3	0.1
10	8266	Visscher Lumber	Lower Fraser Valley								
10	8268	Columbia Bitulithic Limited	Lower Fraser Valley	0.2	0.7	1.4		0.0	10.1	0.0	0.0
10	8328	Tri-V Pet Foods Ltd.	Lower Fraser Valley	0.1	0.4	0.0		0.0	0.1	0.1	0.1
10	8329	Valley Gravel Sales Ltd.	Lower Fraser Valley	0.1	0.4	0.0		0.0	0.1	0.1	0.1
10	8515	Abbotsford Auto Body Ltd.	Lower Fraser Valley	0.1	0.6	0.0		1.0	6.7	4.6	2.0
10	8694	L. C. Pallet & Lumber Ltd.	Lower Fraser Valley						4.5	1.8	0.9
10	8777	Cooper Yachts Ltd.	Lower Fraser Valley								
10	8915	Peter Kiewit Sons Co. Ltd.	Lower Fraser Valley	1.6	3.9	5.6		1.1	3.4	2.7	2.2
10	10496	Mary Van Pelt Incinerator	Lower Fraser Valley	0.1	0.1				0.4	0.3	0.3
10	10567	Saran Cedar Ltd.	Lower Fraser Valley						10.9	4.4	2.2
10	10636	Procor Limited	Lower Fraser Valley		0.0						
10	10651	North American Building Products (1989) Ltd.	Lower Fraser Valley						12.4	5.0	2.5
10	10656	Westree Custom Cedar Products Inc.	Lower Fraser Valley						25.3	10.1	5.1
10	10660	Quadra Wood Products Ltd.	Lower Fraser Valley						4.5	1.8	0.9
10	10817	Grandview Blacktop Ltd.	Lower Fraser Valley	4.9	5.0	37.5		3.5	19.8	2.8	0.2
10	10880	Continental Traffic And Industrial Signs Ltd.	Lower Fraser Valley								
10	11152	Canadian Pallets Inc.	Lower Fraser Valley						2.0	0.8	0.4
10	11210	Martens Asphalt Ltd.	Lower Fraser Valley	5.1	4.9	7.8		3.8	20.4	12.6	4.7
10	11352	Duraglas Products Ltd.	Lower Fraser Valley						16.9	9.7	6.9
10	11475	Biowaste Management Ltd.	Lower Fraser Valley								
10	11894	Coldstream Collision	Lower Fraser Valley					0.1	1.5	0.7	0.4
10	11990	Remag Industries	Lower Fraser Valley	0.2	0.2				0.5	0.4	0.3
10	12028	RP Manufacturing Ltd.	Lower Fraser Valley	0.4	0.9	0.0		0.1	0.4	0.3	0.2
10	12527	Valley Rite-Mix Ltd.	Lower Fraser Valley	0.0	0.2				0.2	0.1	0.0
10	12657	Dynamic Windows & Doors Inc.	Lower Fraser Valley					0.2	10.6	5.0	3.1
10	12836	Ty-Crop Manufacturing Ltd.	Lower Fraser Valley					7.2	0.3	0.1	0.1
10	13008	Candor Interior Specialties Inc.	Lower Fraser Valley					7.1	1.8	0.8	0.4
10	13027	Rempel Bros. Concrete Ltd.	Lower Fraser Valley	0.1	0.4	0.0		0.0	1.2	0.6	0.2
10	13318	Chevron Canada Limited	Lower Fraser Valley					2.5			
10	13640	Target Products Ltd	Lower Fraser Valley	4.9	24.3	0.2		1.3	42.2		
			Totals =	551116.3	65309.5	97031.6	1576.5	52675.8	135784.8	81135.8	57602.7

Note: True zero values have been removed for clarity.
Values shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions are subject to rounding errors, which may result in slight differences between totals.

APPENDIX D

Area Source Emissions by Process

AREA SOURCE EMISSIONS BY PROCESS - BRITISH COLUMBIA EXCLUDING LOWER FRASER VALLEY (page 1 of 2)

Category	Process	Tonnes of Emissions							
		CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
Prescribed Burning	PRESCRIBED BURNING	187965.4	2791.565	9.305217		7948.8886	20056.47	14717.98	13909.78
Space Heating	FUEL OIL COMM/IND	29.4	117.8	176.7		2	11.8	6.5	4.9
Space Heating	FUEL WOOD RESIDENTIAL	93114.3	1169	169.2		31995.3	12270.5	12270.5	11657
Space Heating	LPG COMMERCIAL	21.4	181.9	0.2		6.4	5.4	5.1	4.8
Space Heating	NATURAL GAS COMM/IND	191.4	928	23.2		49.3	111.4	106.9	100.2
Space Heating	OIL RESIDENTIAL	43.1	157.9	258.4		6.1	21.5	11.8	9
Space Heating	NATURAL GAS RESIDENTIAL	421.1	987	26.3		78.3	120.3	115.5	108.3
Space Heating	LPG RESIDENTIAL	11.8	100.3	0.1		3.5	2.9	2.8	2.7
Agriculture	CATTLE					7922.3	714.2	57.1	14.3
Agriculture	CATTLE - MANURE								
Agriculture	FERTILIZER APPLIED						127.9	62.7	17.9
Agriculture	FERTILIZER NITROGEN		404.2						
Agriculture	FUGITIVE EMISSION AGRICULTURAL						6444.7	1353.4	644.5
Agriculture	HORSES					214	63.7	5.1	1.3
Agriculture	HORSES - MANURE								
Agriculture	PESTICIDES					66.2			
Agriculture	PESTICIDES APPLIED						226.8	110.9	32
Agriculture	PIGS					13.7	67.9	5.4	1.4
Agriculture	PIGS - MANURE								
Agriculture	POULTRY						1.3	0.1	
Agriculture	POULTRY - MANURE								
Agriculture	SHEEP					80	54.4	4.4	1.1
Agriculture	SHEEP - MANURE								
Agriculture	WIND EROSION						10946.1	5473	2627.1
Oil and Gas	LOADING AND TANKAGE EMISSIONS AT BULK PLANTS					1740.1			
Oil and Gas	LOADING OF TANKER TRUCKS AT REFINERIES					172.2			
Oil and Gas	LOADING AND TANKAGE EMISSIONS AT BULK TERMINALS					1495.7			
Oil and Gas	NATURAL GAS IND - COMBUSTION - DISTRIBUTION	126.6	255.7			2.5	29.8	29.8	29.8
Oil and Gas	NATURAL GAS IND - COMBUSTION - GAS PROCESSING	34.7	279.3	0.3		17.9			
Oil and Gas	NATURAL GAS IND - COMBUSTION - SERVICE	10.8	49.7	5.2		0.1	3.6	3.6	3.6
Oil and Gas	NATURAL GAS IND - LEAKS - BATTERY				603.1	2103.1			
Oil and Gas	NATURAL GAS IND - LEAKS - GAS PROCESSING				67.5	762			
Oil and Gas	NATURAL GAS IND - LEAKS - DISTRIBUTION					702.5			
Oil and Gas	TANKS, REFUELING & SPILLS AT AUTO SERV STATIONS					5216.5			
Oil and Gas	NATURAL GAS IND - VENTS - TRANSMISSION					924.2			
Oil and Gas	NATURAL GAS IND - VENTS - LVP/HVP LOADING				14	69			
Oil and Gas	NATURAL GAS IND - VENTS - GAS PRODUCTION					781.4			
Oil and Gas	NATURAL GAS IND - VENTS - GAS PROCESSING					666			
Oil and Gas	NATURAL GAS IND - VENTS - FIELD DEHYDRATION				59.3	7281.5			
Oil and Gas	NATURAL GAS IND - VENTS - DRILLING					0.4			
Oil and Gas	NATURAL GAS IND - VENTS - DISTRIBUTION					747.2			
Oil and Gas	NATURAL GAS IND - VENTS - BATTERY					482.8			
Oil and Gas	NATURAL GAS IND - TANKS - LVP LOADING					32.8			
Oil and Gas	NATURAL GAS IND - TANKS - GAS PROCESSING					6.8			

AREA SOURCE EMISSIONS BY PROCESS - BRITISH COLUMBIA EXCLUDING LOWER FRASER VALLEY (page 2 of 2)

Category	Process	Tonnes of Emissions							
		CO	NOx	SOx	TRS	VOC	Part	PM10	PM2.5
Oil and Gas	NATURAL GAS IND - TANKS - BATTERY				118.9	12371.2			
Oil and Gas	NATURAL GAS IND - SPILLS					407.1			
Oil and Gas	NATURAL GAS IND - LEAKS - TRANSMISSION				19.1	713.5			
Oil and Gas	NATURAL GAS IND - LEAKS - LVP LOADING					150.6			
Oil and Gas	NATURAL GAS IND - LEAKS - GAS PRODUCTION				33.7	3451.6			
Oil and Gas	NATURAL GAS IND - COMBUSTION - TRANSMISSION								
Oil and Gas	NATURAL GAS IND - COMBUSTION - PUMPING	16	73.8	4.9		0.1	5.3	5.3	5.3
Oil and Gas	NATURAL GAS IND - COMBUSTION - DRILLING	178.2	855.7	83.5		70.6	59.4	59.4	59.4
Oil and Gas	NATURAL GAS IND - COMBUSTION - BATTERY	1009.4	7987.8	51129.6		713	12.9	12.9	12.9
Solvent Evaporation	APPLICATION OF ARCHITECTURAL COATINGS					1975.9			
Solvent Evaporation	GLUES ADDHESIVES SEALENTS					256.4			
Solvent Evaporation	PRINTING INKS					1038.3			
Solvent Evaporation	METAL DEGREASING					849.3			
Solvent Evaporation	DRY CLEANING					238.4			
Solvent Evaporation	APPLICATION OF COATINGS - AUTO REFINISHING					634.2			
Solvent Evaporation	APPLICATION OF COATINGS - GENERAL INDUSTRIAL					1156.1			
Solvent Evaporation	CONSUMER PRODUCTS					4992.7			
Miscellaneous Burning	AGRICULTURAL BURNING	2014.9	13.9			259.2	345.6	342.2	311.1
Miscellaneous Burning	BACK YARD BURNING	2341.4	167.2	27.9		836.2	446	441.5	401.4
Miscellaneous Burning	STRUCTURAL FIRES	268	6.4			22.2	17.2	17.1	15.5
Miscellaneous Burning	BIO-MED/CREMAT/ANIMAL INCINERATION	3.4	4.1	2.5		0.3	5.4	3.5	2.3
Other	BAKERIES					44.7			
Other	COMMERICAL-LIGHT INDUSTRIAL GENERAL PARTICULATE						326.3	187.3	132.8
Other	CUT BACK ASPHALT APPLICATION					697.2			
Other	BREWERIES	2.2	8.7	0.2		7.1	10.6	3.4	1.6
Other	BARBECUES						159.2	159.2	159.2
Other	FUGITIVE EMISSION CONC/DEM						101.3	8.1	2
Other	LANDFILLS - WOODWASTE					938.4	81.7	6.5	1.6
Other	GRAVEL PITS						12433.2	708.7	
Other	WELDING SHOPS						126.8	126.8	126.8
Other	TOBACCO	118.1	3.4				153.6	153.6	153.6
Other	RESTURANTS						170.4	170.4	158.5
Other	LANDFILLS MUNICIPAL					1074.2	266.8	21.3	5.3
Other	LANDFILLS COMBINED								
	Totals =	287921.6	16543.4	51917.5	915.6	104489.2	66002.4	36769.8	30719.0

Note:

True zero values have been removed for clarity.
Values shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions are subject to rounding errors, which may result in slight differences between totals.

AREA SOURCE EMISSIONS BY PROCESS LOWER FRASER VALLEY (page 1 of 2)

Category	Process	Tonnes of Emissions							
		CO	NOx	SOx		VOC	Part	PM10	PM2.5
Prescribed Burning	PRESCRIBED BURNING	116.86	1.74	0.06		4.94	6.94	4.63	4.63
Space Heating	FUEL OIL - COMMERCIAL	1.33	5.34	7.67		0.09	0.53	0.29	0.22
Space Heating	FUEL WOOD RESIDENTIAL	3185.39	38.64	5.52		604.51	422.33	422.33	392.79
Space Heating	NATURAL GAS COMM/IND	317.94	1541.52	38.54		81.89	184.98	184.98	184.98
Space Heating	NATURAL GAS RESIDENTIAL	842.24	1974	52.59		156.38	240.56	240.56	240.56
Space Heating	OIL RESIDENTIAL	16.46	60.34	94.57		2.33	8.23	4.53	3.46
Agriculture	CATTLE					3045.83	148.55	11.88	2.97
Agriculture	CATTLE - MANURE								
Agriculture	FERTILIZER APPLICATION - NOX		388.39						
Agriculture	FERTILIZER APPLIED - PARTICULATES						122.93	60.23	17.21
Agriculture	FUGITIVE EMISSION AGRICULTURAL						604.88	127.24	60.59
Agriculture	HORSES					86	25.59	2.05	0.51
Agriculture	HORSES - MANURE								
Agriculture	PESTICIDES					11.6			
Agriculture	PESTICIDES APPLIED						48.09	23.56	6.73
Agriculture	PIGS					36.5	181	14.48	3.62
Agriculture	PIGS - MANURE								
Agriculture	POULTRY						5.21	0.42	0.1
Agriculture	POULTRY - MANURE								
Agriculture	SHEEP					19.77	13.44	1.08	0.27
Agriculture	SHEEP - MANURE								
Agriculture	WIND EROSION						3198.79	1599.4	
Oil and Gas	EXT.FL.ROOF GASOLINE TANKAGE AT MARKETING TERMINAL					90.48			
Oil and Gas	EXT.FL.ROOF GASOLINE TANKAGE AT REFINERIES					93.7			
Oil and Gas	FIXED ROOF GASOLINE TANKAGE AT MARKETING TERMINALS					67.93			
Oil and Gas	FIXED ROOF GASOLINE TANKAGE AT REFINERIES					99.36			
Oil and Gas	GASOLINE TANKAGE AT BULK PLANTS					36.94			
Oil and Gas	INT.FL.ROOF GASOLINE TANKAGE AT MARKETING TERMINAL					39.65			
Oil and Gas	INT.FL.ROOF GASOLINE TANKAGE AT REFINERIES					40.68			
Oil and Gas	LOADING GASOLINE INTO RAILCARS					86.21			
Oil and Gas	LOADING GASOLINE INTO SHIPS AND BARGES					284.83			
Oil and Gas	LOADING OF TANKER TRUCKS AT BULK PLANTS					33.21			
Oil and Gas	LOADING OF TANKER TRUCKS AT MARKETING TERMINA					72.29			
Oil and Gas	LOADING OF TANKER TRUCKS AT REFINERIES					5.54			
Oil and Gas	TANKS,REFUELING & SPILLS AT AIRCRAFT REFUELIN					0.77			
Oil and Gas	TANKS,REFUELING & SPILLS AT AUTO SERVICE STAT					2157.19			
Oil and Gas	TANKS,REFUELING & SPILLS AT BULK USERS					947.59			
Oil and Gas	TANKS,REFUELING & SPILLS AT CARDLOCKS					7			
Oil and Gas	TANKS,REFUELING & SPILLS AT MARINE REFUELING					12.35			
Solvent Evaporation	COATING APPLICATION - ARCHITECTURAL					2342.65			
Solvent Evaporation	COATING APPLICATION - AUTO REFINISHING					752.11			
Solvent Evaporation	COATING APPLICATION - GENERAL INDUSTRIAL					997.28			
Solvent Evaporation	CONSUMER PRODUCTS					5929.62			

AREA SOURCE EMISSIONS BY PROCESS LOWER FRASER VALLEY (page 2 of 2)

Category	Process	Tonnes of Emissions							
		CO	NOx	SOx		VOC	Part	PM10	PM2.5
Solvent Evaporation	DRY CLEANING					521.5			
Solvent Evaporation	GLUES ADDHESIVES SEALENTS					296.19			
Solvent Evaporation	METAL DEGREASING					1153.7			
Solvent Evaporation	PRINTING INKS					1229.72			
Miscellaneous Burning	AGRICULTURAL BURNING								
Miscellaneous Burning	INCINERATION	0.41	0.5	0.3		0.04	0.65	0.47	0.02
Miscellaneous Burning	OPEN BURNING	180.35	12.88	2.15		64.41	34.35	34.35	34.35
Miscellaneous Burning	STRUCTURAL FIRES	182.95	4.36			15.14	11.76	11.62	10.59
Other	BAKERIES					53.14			
Other	CONSTRUCTION & DEMOLITION						254.02	53.51	10.16
Other	CUTBACK ASPHALT					108.3			
Other	GENERAL OPERATIONS						127.23	73.03	51.78
Other	LANDFILLS COMBINED					684.71	322.64	25.81	6.45
Other	LANDFILLS MUNICIPAL								
Other	MEAT COOKING - CHARBROILING						178.56	178.56	178.56
Other	MEAT COOKING - FRYING						56.87	56.87	56.87
Other	TOBACCO	158.73	4.62				206.34	206.34	206.34
	Totals =	5002.7	4032.3	201.4		22274.1	6404.5	3338.2	1473.8

Note:

True zero values have been removed for clarity.
Values shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions are subject to rounding errors, which may result in slight differences between totals.

APPENDIX E

Mobile Source Emissions by Process

MOBILE SOURCE EMISSIONS BY PROCESS - BRITISH COLUMBIA EXCLUDING LOWER FRASER VALLEY (page 1 of 2)

Category	Process	Tonnes of Emissions						
		CO	NOx	SOx	VOC	Part	PM10	PM2.5
Light-Duty Vehicles	LDDT, CITY, OTHER VEHICLE EMISSIONS	101.6	96.2	5.8		18.8	18.8	16.5
Light-Duty Vehicles	LDDT, CITY, VEHICLE HYDROCARBONS				55.4			
Light-Duty Vehicles	LDDT, HIGHWAY, OTHER VEHICLE EMISSIONS	46.2	78.2	5.1		16.7	16.7	14.6
Light-Duty Vehicles	LDDT, HIGHWAY, VEHICLE HYDROCARBONS				27.2			
Light-Duty Vehicles	LDDV, HIGHWAY, VEHICLE HYDROCARBONS				16.9			
Light-Duty Vehicles	LDGT1, CITY, VEHICLE HYDROCARBONS				5139.7			
Light-Duty Vehicles	LDGT1, HIGHWAY, VEHICLE HYDROCARBONS				2405.2			
Light-Duty Vehicles	LDGT2, CITY, VEHICLE HYDROCARBONS				413.7			
Light-Duty Vehicles	LDGT2, HIGHWAY, VEHICLE HYDROCARBONS				312.1			
Light-Duty Vehicles	LDGT2, HIGHWAY, OTHER VEHICLE EMISSIONS	2853	291.4	11.3		6	5.8	3.7
Light-Duty Vehicles	MC, HIGHWAY, VEHICLE HYDROCARBONS				68.2			
Light-Duty Vehicles	MC, HIGHWAY, OTHER VEHICLE EMISSIONS	308	35.1	1.4		1.1	1	0.6
Light-Duty Vehicles	MC, CITY, VEHICLE HYDROCARBONS				140			
Light-Duty Vehicles	MC, CITY, OTHER VEHICLE EMISSIONS	1004.6	39.8	2.1		1.6	1.5	0.8
Light-Duty Vehicles	LDGV, HIGHWAY, VEHICLE HYDROCARBONS				7999.1			
Light-Duty Vehicles	LDGV, HIGHWAY, OTHER VEHICLE EMISSIONS	72999.5	8124.6	273.1		153.9	146.4	88.8
Light-Duty Vehicles	LDGV, CITY, VEHICLE HYDROCARBONS				17331.4			
Light-Duty Vehicles	LDGV, CITY, OTHER VEHICLE EMISSIONS	171363.9	10038.6	362.1		200.2	190.4	109.3
Light-Duty Vehicles	LDGT2, CITY, OTHER VEHICLE EMISSIONS	3924.1	216	9.3		4.7	4.6	3
Light-Duty Vehicles	LDGT1, HIGHWAY, OTHER VEHICLE EMISSIONS	24025.5	2858.4	130.8		53.8	52.5	32.6
Light-Duty Vehicles	LDGT1, CITY, OTHER VEHICLE EMISSIONS	57292.8	3566.2	173.3		68.1	66.5	40.1
Light-Duty Vehicles	LDDV, HIGHWAY, OTHER VEHICLE EMSSIONS	34.7	60.5	3.4		12	12	10.4
Light-Duty Vehicles	LDDV, CITY, VEHICLE HYDROCARBONS				40.1			
Light-Duty Vehicles	LDDV, CITY, OTHER VEHICLE EMISSIONS	89.8	87.7	4.5		15.9	15.9	13.8
Heavy-Duty Vehicles	HDDV, CITY, OTHER VEHICLE EMISSIONS	5835.4	7072.2	110.9		519.4	518.9	461.2
Heavy-Duty Vehicles	HDDV, CITY, VEHICLE HYDROCARBONS				1236.8			
Heavy-Duty Vehicles	HDDV, HIGHWAY, OTHER VEHICLE EMISSIONS	5322.3	11525.8	197.1		923.4	922.5	820
Heavy-Duty Vehicles	HDDV, HIGHWAY, VEHICLE HYDROCARBONS				1230.2			
Heavy-Duty Vehicles	HDGV, HIGHWAY, VEHICLE HYDROCARBONS				308.2			
Heavy-Duty Vehicles	HDGV, HIGHWAY, OTHER VEHICLE EMISSIONS	3999.5	545	22		14.4	13.4	8.8
Heavy-Duty Vehicles	HDGV, CITY, VEHICLE HYDROCARBONS				342.6			
Heavy-Duty Vehicles	HDGV, CITY, OTHER VEHICLE EMISSIONS	4226	258.9	12.4		8.1	7.5	5
Railways	DIESEL LINE TRAVEL	3552.7	18473.8	1336.5	923.7	439.9	439.9	404.7
Railways	RAILWAY COAL DUST OUTSIDE LFV					15748.1	15748.1	14488.2
Railways	DIESEL YARD TRAVEL	1375.2	8053	522.3	477.4	194.4	194.4	178.8
Marine Vessels	BC FERRIES UNDERWAY	636.6	4906.9	679.4	231.8	206.9	206.9	190.3
Marine Vessels	RECREATIONAL VESSELS, OUTBOARDS	3128.8	6.3	4.1	1045.6			
Marine Vessels	RECREATIONAL VESSELS, INBOARDS, GASOLINE	26.2	2.8	0.1	1.8			
Marine Vessels	RECREATIONAL VESSELS, INBOARDS, DIESEL	2.1	5.1	0.4	2.7	0.2	0.2	0.2

MOBILE SOURCE EMISSIONS BY PROCESS - BRITISH COLUMBIA EXCLUDING LOWER FRASER VALLEY (page 2 of 2)

Category	Process	Tonnes of Emissions						
		CO	NOx	SOx	VOC	Part	PM10	PM2.5
Marine Vessels	RECREATIONAL VESSELS, IN/OUTBOARDS, GASOLINE	130.8	14	0.6	8.8			
Marine Vessels	RECREATIONAL VESSELS, IN/OUTBOARDS, DIESEL	10.5	25.3	2	13.6	1.2	1.2	1.1
Marine Vessels	HARBOUR VESSELS, CHARTER 30+ M (1400 HP)	1	4.9	0.6	0.4	0.3	0.3	0.3
Marine Vessels	HARBOUR VESSELS, CHARTER 15-30 M (756 HP)	7.7	24.9	3.9	1.8	1.8	1.8	1.6
Marine Vessels	HARBOUR VESSELS, CHARTER 0-15 M (350 HP)	13	88.1	8.9	13.1	4.1	4.1	3.7
Marine Vessels	HARBOUR VESSELS WORKBOATS 500-999 HP	3.4	14.4	1.8	1	0.8	0.8	0.7
Marine Vessels	HARBOUR VESSELS WORKBOATS 1000+ HP	3.3	16.3	2	1.3	0.9	0.9	0.8
Marine Vessels	HARBOUR VESSELS WORKBOATS 0-499 HP	15.5	98.2	10.9	10.6	4.9	4.9	4.5
Marine Vessels	HARBOUR VESSELS TUGBOATS 500-999 HP	170.1	836.5	102.5	67.6	46.6	46.6	42.9
Marine Vessels	HARBOUR VESSELS TUGBOATS 2000+ HP	179.4	747.2	68.6	40.6	31.2	31.2	28.7
Marine Vessels	DEEP OCEAN VESSELS UNDERWAY	3540.9	41629.5	19379.3	1148.4	2201.1	2201.1	2025
Marine Vessels	FISHING VESSELS	41.4	339	32.2	45.2	15.1	15.1	13.8
Marine Vessels	HARBOUR VESSELS TUGBOATS 0-449 HP	103.6	488.4	65.1	37	29.6	29.6	27.2
Marine Vessels	HARBOUR VESSELS TUGBOATS 1500-1999 HP	316.4	628.3	48.8	22.2	22.2	22.2	20.4
Marine Vessels	HARBOUR VESSELS TUGBOATS 1000-1499 HP	159.9	786.2	96.4	63.5	43.8	43.8	40.3
Marine Vessels	DEEP OCEAN VESSELS DOCKSIDE	641.8	3974.8	495.4	1114.7	236.5	236.5	217.5
Marine Vessels	CP FERRIES UNDERWAY	37	284	23.6	13.2	11.5	11.5	10.6
Aircraft	COMMERCIAL JETS	269.5	101.8	7.5	76.5	6	3.3	2.3
Aircraft	COMMERCIAL PISTON	2854.3	1.4	0.3	43.6	37.4	20.7	14.6
Aircraft	GENERAL AVIATION PISTON	242.9	1.1	0.1	4.3	0.5	0.3	0.2
Aircraft	GOVERNMENT-CIVIL JETS	2.7			0.2	0.3	0.2	0.1
Aircraft	HELICOPTERS	17.7	21	3.1	21	22.7	12.6	8.9
Aircraft	MILITARY JETS	3.1	0.1		2.7	0.5	0.3	0.2
Aircraft	PRIVATE JETS	17.8	0.1		1.4	2.2	1.2	0.9
Aircraft	TURBOPROP	274.3	30.3	6.5	193.5	45.4	25.1	17.7
Off-Road	LAWN EQUIPMENT	2784.4	29	2.2	374.2	8.6	8.3	7.6
Off-Road	OFF-ROAD DIESEL - AGRICULTURE	2437	6086.8	96.3	918.1	659.7	659.7	606.9
Off-Road	OFF-ROAD DIESEL - CONSTRUCTION	597.1	1554.8	37.3	131.7	136.1	136.1	125.2
Off-Road	OFF-ROAD GASOLINE - AGRICULTURE	14444.6	488.6	14.1	551.0	29.2	28.1	26.1
	Totals =	391469.6	134657.5	24377.4	44671.0	22207.8	22131.4	20141.2

Note: True zero values have been removed for clarity.
Values shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions are subject to rounding errors, which may result in slight differences between totals.

MOBILE SOURCE EMISSIONS BY PROCESS LOWER FRASER VALLEY (page 1 of 2)

Category	Process	Tonnes of Emissions						
		CO	NOx	SOx	VOC	Part	PM10	PM2.5
Light-Duty Vehicles	LDDTCO	91						
Light-Duty Vehicles	LDDTNOX		130					
Light-Duty Vehicles	LDDTOTHER			8		27.01	27.01	24
Light-Duty Vehicles	LDDTVOC				52			
Light-Duty Vehicles	LDDVCO	76						
Light-Duty Vehicles	LDDVNOX		112					
Light-Duty Vehicles	LDDVOTHER			6		21	21	18
Light-Duty Vehicles	LDDVVOC				37			
Light-Duty Vehicles	LDGT1CO	37696.74						
Light-Duty Vehicles	LDGT1NOX		3980.98					
Light-Duty Vehicles	LDGT1OTHER			189.01		75.11	72.96	44.02
Light-Duty Vehicles	LDGT1VOC				3788.88			
Light-Duty Vehicles	LDGT2CO	16590.97						
Light-Duty Vehicles	LDGT2NOX		1468.98					
Light-Duty Vehicles	LDGT2OTHER			60.96		31	31	20.03
Light-Duty Vehicles	LDGT2VOC				1879.96			
Light-Duty Vehicles	LDGVCO	135245.7						
Light-Duty Vehicles	LDGVNOX		13403.82					
Light-Duty Vehicles	LDGVOTHER			474.92		262.72	252.62	151.57
Light-Duty Vehicles	LDGVVOC				15145.86			
Light-Duty Vehicles	MCCO	828						
Light-Duty Vehicles	MCNOX		55					
Light-Duty Vehicles	MCOTHER			3		2	2	1
Light-Duty Vehicles	MCVOC				121			
Heavy-Duty Vehicles	HDDVCO	3389.97						
Heavy-Duty Vehicles	HDDVNOX		5893					
Heavy-Duty Vehicles	HDDVOTHER			88.03		413.98	412.98	367.02
Heavy-Duty Vehicles	HDDVVOC				710.58			
Heavy-Duty Vehicles	HDGVCO	2261						
Heavy-Duty Vehicles	HDGVNOX		221					
Heavy-Duty Vehicles	HDGVOTHER			9		6	6	4
Heavy-Duty Vehicles	HDGVVOC				155			
Railways	DIESEL LINE TRAVEL	589.32	3068.5	224.72	153.37	73.03	73.03	67.19
Railways	DIESEL YARD TRAVEL	226.09	1324.56	86.96	78.48	31.96	31.96	29.4
Railways	RAILWAY COAL DUST					950.72	950.72	874.14
Marine Vessels	DEEP OCEAN VESSELS - DOCKSIDE	169.61	1048.87	656.78	292.91	61.65	61.65	56.55
Marine Vessels	DEEP OCEAN VESSELS - UNDERWAY	88.99	1046.25	306.7	27.71	55.32	55.32	50.95
Marine Vessels	FERRIES - B.C. FERRIES	155.76	1200.06	160	50.62	48.67	48.67	44.7
Marine Vessels	FERRIES - B.C. MOTH - ALBION FERRY	2	15.28		0.6			
Marine Vessels	FERRIES - B.C. TRANSIT - SEABUS	7	53.95	1	2.28	2.19	2.19	2.01
Marine Vessels	FERRIES - C.P. FERRIES	22.8	175.64	14.6	7.41	7.12	7.12	7.12
Marine Vessels	HARBOUR - CHARTER VESSELS, 0-499 HP	22.12	150.38	14.87	22.3	6.91	6.91	6.36

MOBILE SOURCE EMISSIONS BY PROCESS LOWER FRASER VALLEY (page 2 of 2)

Category	Process	Tonnes of Emissions						
		CO	NOx	SOx	VOC	Part	PM10	PM2.5
Marine Vessels	HARBOUR - CHARTER VESSELS, 1000-1499 HP	5.72	28.15	3.37	2.27	1.57	1.57	1.44
Marine Vessels	HARBOUR - CHARTER VESSELS, 500-999 HP	12.1	39.33	6.05	2.81	2.81	2.81	2.59
Marine Vessels	HARBOUR - FISHING VESSELS	21	175	17	23	8	8	7
Marine Vessels	HARBOUR - TUGS & TOWBOATS, 0-499 HP	17.36	81.84	10.66	6.2	4.96	4.96	4.56
Marine Vessels	HARBOUR - TUGS & TOWBOATS, 1000-1499 HP	36.03	177.2	21.22	14.31	9.87	9.87	8.88
Marine Vessels	HARBOUR - TUGS & TOWBOATS, 1500-1999 HP	82.95	164.74	12.44	5.82	5.82	5.82	5.36
Marine Vessels	HARBOUR - TUGS & TOWBOATS, 2000+ HP	43.66	181.86	16.23	9.87	7.59	7.59	6.99
Marine Vessels	HARBOUR - TUGS & TOWBOATS, 500-999 HP	38.59	189.77	22.73	15.33	10.57	10.57	9.61
Marine Vessels	HARBOUR - WORKBOATS, DIESEL, 0-499 HP	13.02	82.23	8.88	8.88	4.13	4.13	4.13
Marine Vessels	HARBOUR - WORKBOATS, DIESEL, 1000-1499 HP	1.59	7.82	0.94	0.63	0.44	0.44	0.44
Marine Vessels	HARBOUR - WORKBOATS, DIESEL, 1500-1999 HP	2.47	12.21	1.46	0.99	0.68	0.68	0.68
Marine Vessels	HARBOUR - WORKBOATS, DIESEL, 2000 + HP	25.7	126.37	15.15	10.21	7.05	7.05	6.03
Marine Vessels	HARBOUR - WORKBOATS, DIESEL, 500-999 HP	5.27	22.29	2.68	1.54	1.24	1.24	1.24
Marine Vessels	HARBOUR - WORKBOATS, GASOLINE	229	6		9			
Marine Vessels	RECREATIONAL - IN/OUTBOARDS - DIESEL	12.46	30.05	1.88	16.13	1.47	1.47	1.47
Marine Vessels	RECREATIONAL - IN/OUTBOARDS - GAS	133.95	14.38	0.47	8.99			
Marine Vessels	RECREATIONAL - INBOARDS - DIESEL	2.5	6.03	0.38	3.23	0.29	0.29	0.29
Marine Vessels	RECREATIONAL - INBOARDS - GAS	9.69	1.04	0.03	0.65			
Marine Vessels	RECREATIONAL - OUTBOARDS	3652.17	7.3	4.8	1217.39			
Aircraft	COMMERCIAL JETS	28.3	10.69	0.82	8.04	0.63	0.35	0.24
Aircraft	COMMERCIAL PISTON	2535.72	0.99	0.33	38.41	33.13	18.32	12.92
Aircraft	GENERAL AVIATION PISTON	721.81	3.23	0.14	12.83	1.61	0.89	0.63
Aircraft	GOV/CIVIL JET	0.35			0.03	0.04	0.02	0.02
Aircraft	HELICOPTERS	8.8	10.44	1.6	10.32	11.23	6.21	4.38
Aircraft	MILITARY JET	0.43	0.02	0.01	0.37	0.06	0.04	0.03
Aircraft	PRIVATE JET	0.54			0.0	0.07	0.04	0.03
Aircraft	TURBOPROP	19.35	2.16	0.47	13.67	3.21	1.77	1.25
Aircraft	YVR WEIGHTED AVERAGE FROM CLASSIFIED AIRCRAFT	1529.5	972.89	45.21	523.86	74.84	42.1	29.62
Off-Road	LAWN & GARDEN EQUIPMENT	3355.54	34.97	2.6	451.01	10.37	10.04	9.19
Off-Road	OFF ROAD DIESEL - AGRICULTURE	396.72	990.87	15.68	149.46	107.39	107.39	98.79
Off-Road	OFF ROAD GASOLINE - AGRICULTURE	2351.44	79.53	2.29	89.7	4.75	4.6	4.22
Off-Road	OFF-ROAD DIESEL - CONSTRUCTION	903.53	2429.86	54.86	203.29	181.35	181.35	166.51
		213660.4	39237.5	2574.9	25384.2	2571.6	2502.8	2156.6

Note: True zero values have been removed for clarity.
Values shown as 0.0 are between 0.0 and 0.05.
Estimates for total emissions are subject to rounding errors, which may result in slight differences between totals.